DOCUMENT RESUME

ED 228 341 UD 022 682

AUTHOR	Pinkerton, James R.
TITLE	Socioeconomic Determinants of Urban Poverty Area Workers' Labor Force Participation and Income.
INSTITUTION	Missouri Univ., Columbia.
SPONS AGENCY	Employment and Training Administration (DOL), Washington, D.C. Office of Research and Development.
PUB DATE	Aug 78
GRANT	DL-21-29-74-12
NOTE	370p.; A publication of the Department of Rural Sociology. Charts/graphs marginally legible.
AVAILABLE FROM	National Technical Information Service, Springfield, VA, 22151 (write for price).
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC15 Plus Postage.
DESCRIPTORS	Educational Attainment; *Employment Level; *Employment Patterns; *Income; *Individual Characteristics; Job Training; Laborers; *Low Income Groups; Males; Poverty Areas; *Predictor Variables; Racial Differences; Social Discrimination; Socioeconomic Background; Unemployment; Urban Areas; Veterans
IDENTIFIERS	Census Employment Survey; Illinois (Chicago); Missouri (Saint Louis); Texas (San Antonio)

ABSTRACT

This study examined how the socioeconomic characteristics of male workers from poverty areas in Saint Louis, Missouri, San Antonio, Texas, and Chicago, Illinois, affect their incomes, hours of employment, unemployment, and labor force participation. The research was based on statistical analysis, using an interaction model, of data from the 1970 Census Employment Survey. Findings indicated that: (1) whites in poverty areas had higher incomes than Blacks and Hispanics; (2) veterans had higher income and employment levels than non-veterans; (3) workers from the local city or from other large cities worked fewer hours than migrants from rural or smaller areas; (4) educational attainment was positively associated with income; (5) the lowest income and employment levels were in the extreme (youngest and oldest) age groups; (6) health problems, excessive family responsibilities, and minimal family association were associated with lower income and employment levels; (7) full-time employment increased incomes; and (8) differences in occupation and industry produced income and employment level differentials. Based on the findings, recommendations for government action to help low income workers to break out of poverty were formulated. (Author/MJL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
James R. Pinkerton
Univ. of Missouri
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
● Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

SOCIOECONOMIC DETERMINANTS OF URBAN POVERTY AREA WORKERS' LABOR FORCE PARTICIPATION AND INCOME

by

James R. Pinkerton

JAN 1983
RECEIVED
ERIC/CRESS

Department of Rural Sociology

University of Missouri-Columbia
Columbia, Missouri 65211

Final Report Prepared for

U.S. DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION
OFFICE OF RESEARCH AND DEVELOPMENT
WASHINGTON, D.C. 20213

August 1978

This report was prepared for the Employment and Training Administration, U.S. Department of Labor, under research and development grant No. 21-29-74-12. Since grantees conducting research and development projects under Government sponsorship are encouraged to express their own judgment freely, this report does not necessarily represent the official opinion or policy of the Department of Labor. The grantee is solely responsible for the contents of this report. This report may be reproduced in whole or in part for any purpose of the Federal Government.

BIBLIOGRAPHIC DATA SHEET

1. Report No. DLMA 21-29-74-12-1

2\.

3. Recipient's Accession No.

4. Title and Subtitle

Socioeconomic Determinants of Urban Poverty Area Workers' Labor Force Participation and Income

. Report Date August 1978

6\.

7. Author(s) James R. Pinkerton

8. Performing Organization Rept. No.

9. Performing Organization Name and Address

Department of Rural Sociology
University of Missouri-Columbia
Columbia, Missouri 65211

10. Project/Task/Work Unit No.

11. ~~Contract~~/Grant No. DL-21-29-74-12

12. Sponsoring Organization Name and Address

U.S. Department of Labor
Employment and Training Administration
Office of Research and Development
601 D Street, N.W., Washington, D.C. 20213

13. Type of Report & Period Covered Final Report

14\.

15. Supplementary Notes

16. Abstracts

This report examines the impact of poverty-area workers' socioeconomic characteristics on their income, employment, unemployment, and labor force participation levels. Using data from the 1970 Census Employment Survey, this study focuses on black, Spanish-origin, and Anglo male workers, aged 16-64 years, not in school or the Armed Forces, who were living in the poverty neighborhoods of St. Louis, San Antonio, and Chicago. The results suggest that age-group discrimination and disadvantages are more serious barriers than is racial discrimination. Workers from the local city or other large cities work fewer hours than poverty-area migrants from smaller cities or rural areas. Formal education has a stronger impact on income than does the measure of job training used. Workers with health problems show sizable losses in employment and income. Workers in stable family situations are more likely to experience employment success. Differences in workers' job-seeking methods and their occupational and industrial attachments produce substantial differences in employment and income levels.

A literature review and policy recommendations are included in the report.

17. Key Words and Document Analysis. 17a. Descriptors Earnings, Education (includes training), Employment, Ethnic groups, Government policies, Labor, Literature reviews, Males, Manpower utilization, Negroes, Orientation (training), Personnel development, Personnel selection, Population migration, Socioeconomic status, Statistical analysis, Statistical samples, Surveys, Unemployment, Unskilled workers, Upgrading, Urban areas, Vocational guidance.

17b. Identifiers/Open-Ended Terms Poverty, Poverty areas

17c. COSATI Field/Group 5C, 5I, 5K

18. Availability Statement **Distribution is unlimited. Available from National Technical Information Service, Springfield, Virginia 22151**

19. Security Class (This Report) UNCLASSIFIED

20. Security Class (This Page) UNCLASSIFIED

21. No. of Pages 368

22. Price

FORM NTIS-35 (REV. 3-72)

USCOMM-DC 14952-P72

PREFACE

This report is about the male workers who reside in the poverty areas of Chicago, St. Louis, and San Antonio. It is the result of a research effort to provide more insights about the complex interrelationships and relative importance of various social situations and individual characteristics that affect the employment and income levels of these workers.

I undertook this study as a result of a combination of circumstances. First of all, it grew out of my interest in the social causes of poverty and the strategies for combating the employment problems of low-income workers. It also developed because I learned about the Census Employment Survey (CES) of selected low-income areas, which was conducted as part of the overall program of the 1970 Census of Population and Housing. This special survey, which began shortly after the completion of the 1970 census, gathered a wealth of detailed socioeconomic information on individual workers living in poverty districts in 54 urban areas and seven rural areas. During the summer of 1974 the microdata were made available to the public on computer tapes, and I now had a splendid opportunity to analyze a host of variables considered by many researchers as important determinants of labor-market performance.

Another attraction was the opportunity to carry out a comparative study that focused only on workers residing within poverty areas. This made it possible to analyze the differences and similarities between workers in various poverty areas. By using the data from the poverty areas in two major Midwestern cities and in one Southwestern city, I could study the impact of race and ethnicity (Spanish origin versus non-Spanish origin). Also, by excluding metropolitan workers living outside the poverty areas, I was able to look at a more appropriate cross section of workers for making longitudinal inferences about potential improvements in disadvantaged workers' incomes.

A final factor was that recently developed multivariate statistical methods for computer analysis had the advantage over simpler forms of earlier multivariate techniques of being able to handle the mixture of nominal, ordinal, and interval variables that could be obtained from the CES computer tapes; also, these methods did not require the restrictive assumption of linearity in the data. Moreover, two of the new procedures I had learned about appeared to be promising for discovering, along with the direct, independent effects of the predictors, any additional effects following from certain combinations of predictors (interaction effects).

Before turning to the substance of this report, I want to express my appreciation to the many people who helped me to carry out the project described. Funds for this study were granted by the Employment and Training Administration of the U.S. Department of Labor. I thank Dr. Howard Rosen, Director of the Office of Research and Development, for making these funds available and Dr. Stuart H. Garfinkle, who at the time this study was proposed served as Chief of the Demographic Research Group, Employment and Training Administration, for his invaluable advice about the scope of this project and the sources of data. I am grateful to my project officers from the Office of Research and Development, Mrs. Nora Tucker and Ms. Kathy Naughton, for their professional assistance and prodding.

It is difficult to adequately thank Dr. E. E. Liebhafsky, Professor of Economics, University of Missouri-Columbia (UMC), who spurred my original interest in manpower problems and who provided continual

encouragement and constructive criticisms from the beginning to the end of this project. Additionally, he gave helpful advice about administrative matters and directed me to many other people who provided valuable information and assistance.

I am thankful to Dr. Bernard Lazerwitz, Professor of Sociology, Bar-Ilan University, Ramat-Gan, Israel, who was Project Associate in the first year of this study, for his many significant intellectual and methodological contributions. I would also like to acknowledge the valuable methodological assistance given by Mr. Gary Stangler, Senior Research Specialist in the Department of Rural Sociology, UMC. Professional praise and thanks are due to Dr. David W. Stevens, Professor of Economics, UMC, for critically reading the proposal for this project, for allowing me to sit in on his graduate seminar on manpower economics, and for directing me to many useful references on labor force participation.

I am indebted to Mrs. Barbara Matthews for her excellence and ingenuity in writing the computer programs employed in the various analyses performed on the data, and to Dr. Warren Glimpse who administered the computer operations for this project.

Mr. Episcopo and Mr. John Cannon at the U.S. Bureau of the Census in Washington, D.C. were most helpful in answering my questions about the Census Employment Survey computer tapes as I began working with these data.

None of these results would have been possible without the hard work of Mr. Joseph Weber, my research assistant for this project. I owe him many thanks for his relentless efforts in carrying out the time consuming and tedious tasks that were involved in constructing the variables and analyzing the data.

Mrs. Pat Miles and her staff at the UMC Stenographic Services were responsible for diligently typing the final draft of the text and tables. Mrs. Aida Dickherber deserves special recognition for her perserverance and care in the arduous job of drawing and typing the diagrams presented in this report.

I want to express my special thanks to the many professionals and academicians knowledgeable about the employment problems of low-income workers who provided me with the background information so necessary during the early stages of this study for steering my research in relevant directions and generating hypotheses to be tested. Many of these people were located in the cities that I studied--Chicago, St. Louis, and San Antonio:

Chicago, Illinois

Mr. Gerald H. Akiyoshi
Mr. Paul T. Backlund
Mr. Frank Bauer
Ms. Joyce Bolinger
Mr. James D. Broman
Mr. David Cohen
Mr. William Fisher
Dr. John Grede
Dr. Peyton S. Hutchinson
Mr. Lawrence M. Nagatomo
Mr. Marcelino Perez
Ms. Terry Rubio
Mr. LeRoy Whiting

St. Louis, Missouri

Mr. Harold Antoine
Ms. Mary Canada
Mr. Samuel Cork
Mr. John L. Drew III
Mr. William V. Fogler
Mr. Gordon Henderson
Mr. Jerome Hudson
Mr. Arthur Kennedy
Mr. Hugh Liston
Mr. Edwin Pruitt, Jr.
Mr. Mickey Rosen
Ms. Georgia Rusan
Mr. William Schulze
Dr. Allen Tomey

San Antonio, Texas

Mr. James M. Brandes
Mr. Alfredo Cervera
Dr. Antonio Furino
Mr. Ernesto Gonzalez
Mr. Roy A. Medina
Mr. Al Notzon
Ms. Edna Ortega

Many useful insights about the employment problems of Spanish-American workers came from Dr. Vernon Briggs, Department of Economics, University of Texas-Austin, and from the following professionals and academicians I talked with in New Mexico:

Albuquerque, New Mexico

Dr. Larry D. Adcock
Dr. Arthur Blumenfeld
Mr. Richard Lawrence
Ms. Gloria Mallory
Dr. Patrick H. McNamara
Mr. Chris Montaño
Mr. Vincent Montoya
Mr. Herman Ortiz
Mr. Fred Rael
Mr. Sotero J. Sanchez, Jr.
Mr. James Thompson

I also want to thank Dr. Barry Bluestone and Dr. Joan Huber, for leading me to some very informative studies pertaining to my research, and Dr. William McKee, for the interpretations he suggested after examining the findings from my study.

Finally, I owe a special debt to my wife Midge who, despite her own career commitments, greatly facilitated the preparation of this report with her editorial assistance and provided sustained support in many ways.

Despite the considerable assistance received from other parties, I am entirely responsible for all of the judgments and shortcomings in this report.

James. R. Pinkerton

University of Missouri-Columbia
July 1978

CONTENTS

Page

PREFACE v

LIST OF MAPS xiii

LIST OF FIGURES xv

LIST OF TABLES xvii

EXECUTIVE SUMMARY xxv

Findings
Recommendations

Chapter

1. INTRODUCTION 1

    Culture of Poverty Model
    Structural Model
    Eclectic Model

2. POVERTY THEORIES AND PREVIOUS RESEARCH 13

    Race and Ethnicity
    Rural versus Urban Background
    Education and Race
    Education and the Dual Labor Market
    Education and Personality
    Education and Age
    MDTA - Institutional Training
    Job Corps
    Neighborhood Youth Corps
    Age
    Marriage and Family Size
    Job-Seeking Methods
    Health
    Occupation
    Industry

CONTENTS (Continued)

Chapter Page

3. STUDY DESIGN 35

Samples and Areal Units
Dependent Variables
Independent Variables
Personal Variables - Antecedent
Personal Variables - Current
Labor Force Variables
Analytical Techniques

4. INCOME 77

MCA Findings
MCA Summary Statistics
AID Analysis
Discussion of MCA and AID Findings

5. EMPLOYMENT 167

MCA Findings
Discussion of MCA Findings
AID Findings

6. UNEMPLOYMENT 221

MCA and THAID Summary Statistics
MCA Detailed Findings
THAID Findings

7. LABOR FORCE PARTICIPATION 269

8. SUMMARY AND POLICY RECOMMENDATIONS 307

Findings
Recommendations

REFERENCES 325

LIST OF MAPS

Map	Page
1. ST. LOUIS, MO., City Showing Census Employment Survey Area . . .	40
2. ST. LOUIS, MO., Census Employment Survey Area	41
3. SAN ANTONIO, TEX., City Showing Census Employment Survey Area	42
4. SAN ANTONIO, TEX., Census Employment Survey Area	43
5. CHICAGO, ILL., Portion of City including Census Employment Survey Area	45
6. CHICAGO, ILL., Census Employment Survey Area I	46
7. CHICAGO, ILL., Census Employment Survey Area II	47

LIST OF FIGURES

Figure Page

1. Total Annual Income, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers) 125

2. Total Annual Income . . . Chicago (Area II) Poverty Area (1,445 Workers) 134

3. Total Annual Income . . . San Antonio Poverty Area (1,988 Workers) 141

4. Total Annual Income . . . Chicago (Area I) Poverty Area (1,665 Workers) 143

5. Annual Hours Employed, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers) 205

6. Annual Hours Employed . . . San Antonio Poverty Area (1,988 Workers) 206

7. Annual Hours Employed . . . Chicago (Area I) Poverty Area (1,665 Workers) 207

8. Annual Hours Employed . . . Chicago (Area II) Poverty Area (1,445 Workers) 208

9. Modal Hours Unemployed (THAID Model, Delta Criterion) by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces Unemployed in the Last 12 Months, St. Louis Poverty Area (233 Workers) 255

10. Modal Hours Unemployed (THAID Model, Delta Criterion) . . . San Antonio Poverty Area (293 Workers) 256

11. Modal Hours Unemployed (THAID Model, Delta Criterion) . . . Chicago (Area I) Poverty Area (272 Workers) 257

12. Modal Hours Unemployed (THAID Model, Delta Criterion) . . . Chicago (Area II) Poverty Area (192 Workers) 258

13. Annual Hours in the Labor Force, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers) 292

Figure Page

14. Annual Hours in the Labor Force . . . San Antonio Poverty Area (1,988 Workers) 293

15. Annual Hours in the Labor Force . . . Chicago (Area I) Poverty Area (1,665 Workers) 294

16. Annual Hours in the Labor Force . . . Chicago (Area II) Poverty Area (1,445 Workers) 295

15

LIST OF TABLES

Table | Page
1. Hypothesized Relationships of Socioeconomic Variables with Annual Income 79

2. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers) 83

3. Relationship Between Annual Income and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 84

4. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 85

5. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 86

6. Relationship Between Annual Income and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 92

7. Relationship Between Annual Income and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 93

8. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 94

9. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 95

10. Relationship Between Annual Income and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 98

11. Relationship Between Annual Income and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 99

Table Page

12. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 100

13. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 101

14. Relationship Between Annual Income and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 108

15. Relationship Between Annual Income and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 109

16. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 110

17. Relationship Between Annual Income and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 111

18. Summary of Relationships Between Socioeconomic Variables and Annual Income that Follow (F), Partially Follow (P), and do not Follow (N), Patterns Hypothesized 116

19. MCA and AID Summary Statistics for 19 Predictors of Annual Income, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area 118

20. MCA and AID Summary Statistics for 19 Predictors of Annual Income . . . San Antonio Poverty Area 119

21. MCA and AID Summary Statistics for 19 Predictors of Annual Income . . . Chicago (Area I) Poverty Area 120

22. MCA and AID Summary Statistics for 19 Predictors of Annual Income . . . Chicago (Area II) Poverty Area 121

23. Annual Income of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area, Final AID Groups in Rank Order by their Averages 154

24. Annual Income . . . St. Louis Poverty Area, Final AID Groups in Rank Order by their Averages 157

25. Annual Income . . . Chicago (Area I) Poverty Area, Final AID Groups in Rank Order by their Averages 160

Table Page

26. Annual Income . . . Chicago (Area II) Poverty Area, Final AID Groups in Rank Order by their Averages 163

27. Hypothesized Relationships of Socioeconomic Variables with Annual Hours Employed 169

28. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area 173

29. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed . . . San Antonio Poverty Area 174

30. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed . . . Chicago (Area I) Poverty Area 175

31. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed . . . Chicago (Area II) Poverty Area 176

32. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers) 178

33. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 179

34. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 180

35. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 181

36. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 182

37. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 183

38. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 184

39. Relationship Between Annual Hours Employed And Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 185

Table Page

40. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 186

41. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 187

42. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 188

43. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 189

44. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 190

45. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 191

46. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 192

47. Relationship Between Annual Hours Employed and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 193

48. Summary or Relationships Between Socioeconomic Variables and Annual Hours Employed that Follow (F), Partially Follow (P), and do not Follow (N), Patterns Hypothesized 195

49. Annual Hours Employed of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area, Final AID Groups in Rank Order by their Averages 209

50. Annual Hours Employed . . . San Antonio Poverty Area, Final AID Groups in Rank Order by their Averages 211

51. Annual Hours Employed . . . Chicago (Area I) Poverty Area, Final AID Groups in Rank Order by their Averages 214

52. Annual Hours Employed . . . Chicago (Area II) Poverty Area, Final AID Groups in Rank Order by their Averages 217

Table Page

53. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area 226

54. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours . . . San Antonio Poverty Area 227

55. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours . . . Chicago (Area I) Poverty Area 228

56. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours . . . Chicago (Area II) Poverty Area 229

57. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (233 Workers) 232

58. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . San Antonio Poverty Area (293 Workers) 233

59. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (272 Workers) 234

60. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (192 Workers) 235

61. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . St. Louis Poverty Area (233 Workers) 240

62. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . San Antonio Poverty Area (293 Workers) 241

63. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (272 Workers) 242

64. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (192 Workers) 243

Table Page

65. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . St. Louis Poverty Area (233 Workers) 244

66. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . San Antonio Poverty Area (293 Workers) 245

67. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (272 Workers) 246

68. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (192 Workers) 247

69. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . St. Louis Poverty Area (233 Workers) 248

70. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . San Antonio Poverty Area (293 Workers) 249

71. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (272 Workers) 250

72. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (192 Workers) 251

73. Summary of Relationships Between Socioeconomic Variables and Percent Unemployed Over 400 Hours that Follow (F), Partially Follow (P), and Do Not Follow (N) Patterns Hypothesized . . . 253

74. Proportions Unemployed 400 Hours or Less and More than 400 Hours, Male Workers 16-64 Years Old, Not in School or Armed Forces, Unemployed in the Last 12 Months, St. Louis Poverty Area, Final THAID Groups (Delta Criterion) 262

75. Proportions Unemployed 400 Hours or Less and More than 400 Hours . . . San Antonio Poverty Area, Final THAID Groups (Delta Criterion) 264

76. Proportions Unemployed 400 Hours or Less and More Than 400 Hours . . . Chicago (Area I) Poverty Area, Final THAID Groups (Delta Criterion) 266

21

Table Page

77. Proportions Unemployed 400 Hours or Less and More than 400 Hours . . . Chicago (Area II) Poverty Area, Final THAID Groups (Delta Criterion) 268

78. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area 272

79. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force . . . San Antonio Poverty Area 273

80. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force . . . Chicago (Area I) Poverty Area 274

81. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force . . . Chicago (Area II) Poverty Area 275

82. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers) 276

83. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 277

84. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 278

85. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 279

86. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 280

87. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 281

88. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 282

Table Page

89. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 283

90. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 284

91. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 285

92. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 286

93. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 287

94. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . St. Louis Poverty Area (1,333 Workers) 288

95. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . San Antonio Poverty Area (1,988 Workers) 289

96. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area I) Poverty Area (1,665 Workers) 290

97. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics . . . Chicago (Area II) Poverty Area (1,445 Workers) 291

98. Annual Hours in the Labor Force of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area, Final AID Groups in Rank Order by their Averages 296

99. Annual Hours in the Labor Force . . . San Antonio Poverty Area, Final AID Groups in Rank Order by their Averages . . . 298

100. Annual Hours in the Labor Force . . . Chicago (Area I) Poverty Area, Final AID Groups in Rank Order by their Averages 300

101. Annual Hours in the Labor Force . . . Chicago (Area II) Poverty Area, Final AID Groups in Rank Order by their Averages 304

EXECUTIVE SUMMARY

U.S. Employment and Training Administration (ETA) programs in job development, vocational training, basic education, subsidized employment, income maintenance and other services represent some of this country's major efforts to help low-income people to improve their lives. There is a limit, however, to societal resources for upgrading worker skills and employability or for helping employers provide more jobs for the disadvantaged. As a result, ETA policymakers continue to seek more efficient and effective strategies for combating the employment problems of the poor.

In this study, we sought new knowledge about the socioeconomic determinants of workers' poverty and prosperity that would help policymakers: 1) to determine which employment and training approaches to emphasize; and 2) to design improved methods of delivery. To achieve these ends, we analyzed the 1970 Census Employment Survey (CES) data (for published data reports see U.S. Bureau of the Census, 1972) on male workers 16 to 64 years old residing in the poverty areas of St. Louis, San Antonio and two poverty areas in Chicago, who were employed at least one week in the 12 months preceding the survey who were not in school at any time while not working or looking for work during that period and who were not in the Armed Forces.

Our goal was to learn more about how male poverty-area workers' socioeconomic characteristics affect their annual incomes and their annual hours of employment, unemployment, and labor force participation. We searched for new information about the impact that eliminating racial and social discrimination, improving employability, and changing economic institutions would have in the struggle to eradicate poverty. Specifically, we wanted to know to what extent low incomes and employment levels in urban poverty areas are the result of discrimination against workers who are black, of Spanish origin, or relatively young or old. To what degree can low income and employment levels be raised by upgrading the education, skills, health, and job-seeking methods of the poor? Also, are income and employment levels influenced by poverty-area workers' residential origin, locational ties, and their family relationships and responsibilities? Finally, how much are income and employment affected by differences in ghetto workers' occupational and industrial attachments? This study employed three distinctive computerized techniques--Multiple Classification Analysis (MCA), Automatic Interaction Detector (AID), and THAID--to examine the 1970 CES data to obtain predictive values for these relationships.

Findings

It is the general finding of this study that each of the major elements that we tried to measure--discrimination, employability development, and economic structure--plays a role in determining how many hours per year a poverty-area worker will be employed and how much his annual income will be. Moreover, when the ghetto workers are seeking employment, each of these forces has an effect on the length of time that they will be unemployed.

Our specific findings follow:

1. Workers who are black or of Spanish origin are more likely to reside in an urban poverty area than are Anglo workers. Moreover, Anglo workers who do live in urban poverty areas average higher in income than their

black and Spanish-origin neighbors, and the time spent unemployed is likely to be shorter for a white worker than for a black worker in the same area.

2. Average income and employment levels are higher for veterans than for non-veterans in all four poverty areas. The income advantages of veterans over non-veterans are quite sizable in the St. Louis and San Antonio poverty areas. However, when the other predictors in our study are controlled, veteran status has little independent effect on income or employment in any of the poverty areas. Hence, veteran status is associated with other predictors in our study.

3. There is some evidence that workers from the local city or other large cities work fewer hours than migrants to the poverty area who come from smaller cities or rural areas.

4. Years of school completed generally has a positive association with income. However, our evidence suggests that for older workers with only an eighth grade education, their experience and tenure counteract some of the negative impacts fewer years of schooling have on income and employment levels. Moreover, at the time older workers graduated from the eighth grade educational requirements for employment were lower than they are now.

Our results show that the impact of job training on poverty workers' income levels is not as great as the impact from educational attainment. However, our findings would probably show wider income differences between workers with and without job training if our measure of job training did not include workers in the Neighborhood Youth Corps.

5. Age is one of the strongest predictors of income, employment, and unemployment levels in each of the poverty areas studied. The correlation of age with income and employment follows the expected curvilinear pattern, with the lowest income and employment levels in the youngest years and the

next lowest in the oldest working years. Our results suggest that age-group discrimination is a more serious problem for poverty-area workers than are racial and ethnic discrimination.

6. Workers who said that health problems hinder their employment success show sizable losses in hours of employment and income level. Moreover, in three of the four poverty areas the period of unemployment for a worker seeking a job is likely to be longer than average if he has a health problem. Our findings reveal that the extent to which poor health lowers these workers' employment and income levels remains sizable even after taking into account the effects of all the other determinants measured in the study.

7. Poverty-area workers with excessive family responsibilities as well as those with minimal family associations are more likely to fall below the average employment and income levels in their areas while workers in stable family situations are more likely to be above the average.

8. The approximately eight out of ten poverty-area employed workers who did not look for other work during the previous year earned considerably more than those who did search for a new job. Hence, simply staying employed full-time, full-year the worker can travel quite far along the road out of poverty, though it is not always far enough. However, there were also sizable differences in the income and employment levels of those who sought work, according to the type of job-seeking method they used.

9. Differences in the occupation and industry to which a worker is attached produce substantial differences in the income and employment levels of poverty-area workers independent of their social background, education, and training.

Workers residing in poverty areas find that the most opportunities for full-year employment at higher wages are in government jobs. Construction workers generally have the lowest employment levels, but their income levels remain high.

10. Many of the relationships of the socioeconomic variables to income and employment are not uniform throughout each sample. The main effects of each predictor are not always the same or even present among all groups of workers in an area. Each area has some unique conditions that can best be understood by local experts and leaders, as they have the best opportunity to develop knowledge about how all of the relevant forces affecting poverty in the community interrelate to form an organic whole.

Recommendations

We offer the following specific recommendations for courses of action to be undertaken or further emphasized by the Department of Labor and other government agencies to help low-income workers obtain better jobs and break out of poverty.

1. Further emphasis should be given to providing students with career planning and exploration activities before they graduate or drop out of school, integrating classroom instruction with work experience, and designing and developing curriculum materials that will better prepare students for occupational requirements. Also, efforts must be made to place young, secondary-market workers into "bridge" jobs that provide employment at decent pay, informal and close supervision, informal personnel policies, a chance to learn a trade, and linkages (information, contacts) with the larger, more profitable firms in the central economy which have primary career jobs.

2. Further attention needs to be given to raising the employment and income levels of the aged poor. The Senior Community Service Employment Program (authorized by Title IX of the Older Americans Act of 1974 as amended) appears to be a good example of an appropriate type of effort. The programs of the Employment Service to provide their services to older workers on an intensified and individualized basis should be encouraged and considerable attention given to evaluating and improving the effectiveness of their procedures. More attention needs to be given to effective enforcement of the antidiscrimination legislation protecting older workers. Also, there should be a more effective division of labor between direct income transfers to the aging poor and counseling-training-placement programs for this group. Nevertheless, many older workers who are no longer suited for their former occupations and not retrainable for new occupations for which there is a demand in private industry may still be better off, both mentally and physically, in subsidized job programs rather than simply retired with an adequate income supplement.

3. The Department of Labor's existing labor market information system needs to be expanded to provide more information that can assist the Employment Service in matching currently available workers with currently available jobs. At the same time, efforts are required to improve the image of the local State Employment Service offices so that more poverty-area workers will seek their services.

4. Programs designed both to adapt the disadvantaged worker to the organization and vice-versa have emerged in some companies; the Federal Government needs to use its power and resources to encourage and monitor these efforts. In primary industries more consideration needs to be given to the possibilities--during a probationary period--of learning how

temporarily to accommodate to the unstable work characteristics, e.g., in punctuality and regularity, of workers from the secondary labor market.

5. Young workers who grew up in the local area may need counseling and job information that is somewhat different from that received by young migrants from small cities and rural areas. Migrants from other large cities may need still different kinds of counseling and information to ease the transition from school to work.

6. Government programs providing income supports and public service employment should be designed to keep male workers with their families when employment and financial problems arise. Otherwise, separation may participate further cycles of unemployment and money problems. Also, innovative strategies are needed to provide stronger family ties for workers who are too young for marriage and for older workers who are single, divorced, or widowed. These programs, however, need to be considered experimental and carefully analyzed, for the relationship between income and family structure is affected by other important variables.

7. Poverty workers with health problems clearly need special assistance. Our findings underscore the importance of the Department of Labor coordinating its counseling, training, and job placement programs with the health services arranged through the Department of Health, Education, and Welfare. For some workers, however, effective employment programs may be a more important determinant of good health than is medical care.

8. We support the position that employability development is necessary but not sufficient for solving employment problems in the urban poverty areas. The Federal Government must also help to find solutions for

those segments of the economic system that provide less than satisfactory jobs and incomes for those with adequate ability and skills.

Chapter 1

INTRODUCTION

As we begin our third century as a nation, a majority of our citizens enjoys one of the highest standards of living in the world. Unfortunately, this condition is not yet a reality for all Americans. Indeed, a sizable minority lives in poverty. Using an index developed by a Federal Interagency Committee, the Census Bureau estimated that 11.8 percent of the U.S. population was below the poverty level in 1976. Almost 25 million people, a number larger than the entire population of Canada, did not have sufficient incomes to maintain a nutritionally adequate diet and other minimum living conditions. Census figures also reveal that while the incidence of poverty steadily and substantially decreased during the 1960's, thus far this trend has not continued during the 1970's. Twice during the first seven years of this decade the proportion of low-income persons has risen before it declined, so the net result is that currently the poverty level is only slightly lower than it was in 1969. Clearly, the eradication of poverty continues to be one of the major challenges facing our society.

Of course, not all people with low-incomes suffer equally. The degree of physical and psychological destruction wrought by poverty varies considerably among individuals. For most, however, poverty is a heavy burden; much too often it contributes to poor health, broken families, unsatisfactory care and education of children, illegal and violent activities, mental illness, and unproductive, unfulfilled lives.

U.S. Employment and Training Administration (ETA) programs in job development, vocational training, basic education, subsidized employment, income maintenance and other services represent some of this country's major efforts to help low-income people to improve their lives. There is a limit; however, to societal resources for upgrading worker skills and employability or for helping employers provide more jobs for the disadvantaged. As a result, ETA policymakers continue to seek more efficient and effective strategies for combating the employment problems of the poor.

Choosing among alternative approaches and designing better programs requires additional knowledge about the causes of employment problems and the impact of current efforts. The ETA already has acquired considerable knowledge about the many economic, sociological, psychological, political, and physical problems that plague low-income workers. More information is needed, however, about the complex interrelationships and relative importance of the various societal conditions and individual characteristics that maintain the low-income position of many workers, and the personal and structural changes that move some of these workers out of poverty.

In this study our goal was to learn more about how male poverty-area workers' socioeconomic characteristics affect their annual incomes and their annual hours of employment, unemployment, and labor force participation. We searched for new information about the impact that eliminating racial and social discrimination, improving employability, and changing economic institutions would have in the struggle to eradicate poverty. We hoped that our research findings would lead to recommendations helpful to policymakers: 1) in determining which employment and training approaches to emphasize; and 2) in designing improved methods of delivery.

To achieve these ends, we analyzed the 1970 Census Employment Survey (CES) data (for published data reports see U.S. Bureau of the Census, 1972) on male workers 16 to 64 years old residing in the poverty areas of St. Louis, San Antonio, and two poverty areas in Chicago, who were employed at least one week in the 12 months preceding the survey who were not in school at any time while not working or looking for work during that period and who were not in the Armed Forces. This study employed three distinctive computerized techniques--Multiple Classification Analysis (MCA), Automatic Interaction Detector (AID), and THAID--to examine the 1970 CES data to obtain predictive values for hypothesized relationships and to help search for new insights about the forces that cause inefficient utilization of the inner-city's manpower.

The voluminous literature on poverty contains many different ideas about the causes, consequences, and programs for combating this problem. Any short summary of this material runs the risk of arbitrariness and oversimplification. Nevertheless, in the rest of this chapter we will attempt to outline the main ideological themes underlying the current poverty debate as a basis for pointing out the contribution made by our own study to this discourse.

The remainder of this report consists of seven chapters.

Chapter 2, "Previous Research," presents a summary of the results from previous studies that provided the foundation for the hypotheses formulated and tested in this study.

Chapter 3, "Study Design," describes the samples, areal units, data sources, dependent variables, independent variables (predictors), and analytical techniques used in this analysis.

Chapter 4, "Income," begins with a presentation of the hypotheses specifying the expected pattern of relationship of each independent variable to the poverty-area workers' annual income levels. Then there is an analysis to determine how well the findings fit the patterns that were hypothesized. The chapter concludes with an interpretation of the various results.

Chapter 5, "Employment," tests a set of hypotheses pertaining to the impact of various socioeconomic characteristics on annual hours of employment. After evaluating the findings, we close by offering some tentative explanations and predictions.

Chapter 6, "Unemployment," examines the influence of our set of socioeconomic variables on length of unemployment among those poverty-area workers who had looked for work or been on layoff from a job sometime during the previous 12 months. A number of hypotheses are presented and tested. An evaluation of the results follows.

Chapter 7, "Labor Force Participation," presents the tables for all of our findings on this variable, but because these results add little to the information and ideas reported in earlier chapters they are not described and discussed. We find that the general effect of adding together "hours employed" and "hours unemployed" (the two components of the labor force participation variable) is simply to produce a weaker version of the patterns of relationship found for the employment variable as reported in Chapter 5.

Chapter 8, "Summary and Policy Recommendations," draws together the most important findings from the previous chapters. It closes with our recommendations for courses of action to be undertaken or further emphasized by the Department of Labor and other government agencies.

Culture of Poverty Model

Many of the current efforts to explain the persistence of poverty in the United States can be divided into two basic intellectual positions: 1) deficiencies in the personal characteristics of the poor lead to their low status in the society; 2) the disadvantaged position of the lower class is brought about by the higher classes preserving their advantages by preventing a greater sharing of the available jobs, power, and wealth.

In recent years, the "culture of poverty" model has been a popular justification for the position that the poor are poor through their own lack of ability and initiative. According to this view, the poor differ from the rest of society not only in income, but also in their values, beliefs, and norms (see, for example, Lewis, 1959, 1966; Moynihan, 1965; W. B. Miller, 1958; and Matza, 1966). Members of this virtually autonomous subculture of poverty develop personality defects and deviant habit patterns that keep them trapped in a cycle of frequent unemployment, low income, and hopelessness. This lower-class subculture becomes self-generating because the process of early socialization into the system inhibits behavior that might lift the individual out of poverty. The model assumes that by the time a child reaches age six or seven his value-attitude system and response pattern is virtually set for life. Consequently, slum-culture children enter school with a fixed sense of resignation or fatalism and an inability to put off satisfaction of immediate desires in order to prepare for the future. These social-psychological inadequacies become linked with low educational motivation, inadequate planning and training for a job, absence of personal "contacts," ineffective job-seeking methods, and a rejection of the "work ethic" and work-related behavior patterns.

Thus, in contrast to the 19th Century negative stereotype of the poor, this description does not emphasize the disparaging idea of individual responsibility being associated with these character weaknesses. Instead, it is the subculture that creates these differences.

As a result of the work inhibitions of the poor, they are prevented from getting and holding the good jobs that are presumed to be available in our affluent society. One might argue that there are never enough adequately-paying jobs to go around. But according to the culture of poverty model, developing a large number of new positions would not be a sufficient solution as long as the poor continue to hold their old values.

Therefore, the conclusion from this thesis is that the lower class must be assimilated into working-class or middle-class patterns of thinking and behavior before poverty can disappear. This cannot be done, however, by the individual on his own. Agencies in the larger society are required to resocialize the disadvantaged through social work, psychiatry, and education. In addition, vocational training is necessary to provide the low-income workers with salable skills.

Structural Model

Contrasted with the culture of poverty explanation is the position that poverty results from depriving certain people access to the opportunity structure of the larger society. (For example see Bluestone, Murphy, and Stevenson, 1973; D. M. Gordon, 1972; Liebow, 1967; Van Til, 1973.) According to this view, personality flaws and cultural differences are not the basic determinants of poverty. The poor share the conventional values of American society such as high educational and occupational attainment, but as a result of situational restrictions they are unable to reach these goals.

Thus, low-income workers remain in poverty, not as a result of their values, but rather because of institutional barriers that prevent them from obtaining employment in the central or core economy where high capital-labor ratios, high profits, favorable government policies, and relatively strong unionization predominate. Those without status or power (often because of racism) are kept out of these jobs because a low-skilled laboring class is required to do the dirty, boring, irregular, low-paying jobs presently structured into our economy. Social myths that the culture of poverty causes irreparable damage to the personalities of low-income workers serve the important function of justifying the inequalities in the economic system.

Herbert Gans (1972) argues that in addition to filling the undesirable jobs, the poor serve a number of other functions for affluent groups. For example, poverty creates jobs for a number of occupations and professions that serve the poor or shield the rest of the population from them. Also, the poor buy goods that others do not want (day-old bread, fruit, and vegetables; second-hand clothes; deteriorating automobiles; slum housing) and thus prolong their economic usefulness.

Gans recognizes that poverty also has many dysfunctions for the prosperous classes (such as paying higher taxes to support welfare programs), but he doubts that they outweigh the functions. Poverty persists because the functional alternatives would require the rich to give up some of their income andpower--something they are unlikely to do--and the poor alone do not have enough power to change the system of social stratification.

Rodman (1963) suggests that many of the disadvantaged may hold middle-class values and at the same time develop alternative values to fit their particular conditions of economic deprivation and social dishonor. Behavior defined as deviant from the middle-class point of view is not stigmatized within the lower class, for it represents practical responses to the denial of cultural and economic resources by the structure and processes of the larger society. In fact, Rodman believes that deviant and revolutionary behavior would be more pronounced among lower-class people if they did not continue to be partially committeed to conventional standards.

In summary, the structuralists argue that the fault lies not in the victims, but in the system. If the poor were given the opportunity to obtain steady employment at adequate wages, their behavior would come to resemble that of the solid working-class and middle-class populations. Satisfactory employment for the low-income workers will not become available, however, unless the whole society is radically altered and a redistribution of resources is accomplished. Inasmuch as the higher social classes are unwilling to share their advantages, these changes can come about only through succession to power by leaders of the poor.

Eclectic Model

Clearly, the culture of poverty and structural models contain many differences in view point. There are writers, however, who do not judge these models to be in complete opposition to each other. Some formulations incorporate certain propositions from both of these theories. Charles Valentine (1968: 141-147) has summarized some ideas from the literature that are, in part, a synthesis of the culture of poverty and structural formulations. This eclectic model proposes that some of the cultural patterns of the lower class are different while others follow the norms and values of the middle class or the total system. Moreover, the extent and character of those subcultural patterns that are different vary from one ethnic or racial group to another. The poverty subcultures, like those of other subsocieties, include not only disabling elements, but also healthy positive characteristics that represent creative adaptations to the conditions of deprivation. Historical antecedents as well as contemporary forces have brought about the structural conditions and subcultural patterns of the poor. These determinants vary from one ethnic, racial, or regional group to another, but generally a number of variables are involved, often including some from both the structural and culture of poverty models.

According to this eclectic model, efforts to help the poor will "require more or less simultaneous, mutually reinforcing changes in three areas: increases in the resources actually available to the poor; alterations of the total social structure; and changes in some subcultural patterns" (Valentine, 1968: 143).

Social scientists with an eclectic perspective have different opinions about the relative impact on poverty of subcultural disabilities versus structural inequities. For example, Valentine's personal view is that subcultural defects are part of the problem, but that structured inequalities are the principal problem.

One can take essentially a structural perspective and still include individual weaknesses of the poor as part of the model. This structural position stresses that the larger social system directly and indirectly causes many other disadvantages for the poor in addition to blockage of good job opportunities. These other disadvantages include situational and individual conditions that also could prevent workers from obtaining satisfactory employment. Examples of such factors are insufficient formal education and job training, poor health care, inadequate housing, inaccessibility to employment sites, inaccurate and incomplete job information, and inability to migrate to other communities that have better job opportunities.

Thus, while some of these disadvantages may also stem, in part, from the social-psychological components of the culture of poverty (different values, norms, sentiments, perceptions, beliefs, attitudes), this is not necessarily the case. Some low-income workers probably have the personality characteristics that are needed to achieve employment success (ambitious, work-oriented, etc.), but the social system may generate a number of situational constraints and personal disabilities for the poor that prevent them from being able to obtain good jobs. Some of these objective (non-social psychological) factors may be interrelated and become part of a vicious circle in which each factor acts on the other in such a way as to help preserve the low-income worker's inferior position in the social structure. Efforts to break this kind of a poverty cycle would attempt to make individual as well as structural changes, but they would not try to "resocialize" or change an individual's personality.

In this study the entire focus is on objective socioeconomic variables. These variables measure some of the differences among poverty-area workers in their personal traits, experiences, situations, and behavior patterns. Some of these differences may have their origin in the workers' early socialization experiences, but this area of analysis is beyond the scope of our study. Thus, while some of our variables may be interrelated with the social-psychological forces proposed by the culture of poverty theory, none of our variables directly measures any of these phenomena. We have examined the relationship of these socioeconomic variables not only to the poverty-area workers' income levels, but also to their employment rates, unemployment levels, and their total labor force participation rates.

Chapter 2

PREVIOUS RESEARCH

In this chapter we will summarize the results from previous studies that provided a basis for the hypotheses formulated and tested in this study. The number of specific hypothesized relationships included in our analyses is rather sizable. Consequently, we will not present a complete review of the literature pertaining to each hypothesis, as this would produce a voluminous report. We will, however, introduce the main findings and ideas that are linked with our study.

Race and Ethnicity

It is well-known that black and Spanish-origin workers (who may be of any race, but in most cases are white) in this country have less employment success and lower incomes than white, Anglo workers. White male workers generally experience higher participation in the labor force than nonwhite men (Bowen and Finegan, 1966; Cohen, et al., 1970: 28-30). Mooney's (1967: 107-109) study of poverty areas found higher labor force participation (LFP) rates for poor nonwhite males than for poor white males; but part of the reason was that the white poor population contained a larger proportion of persons in the retirement years (65 and older). In addition, the white poor may have greater employment disabilities than their black counterparts, because some workers in the latter group experience unemployment solely as a result of discrimination. Hill (1971, Table 3) also found higher LFP for the black poor than the white poor. For the nonpoor, however, whites had a higher rate than blacks.

Mexican-American male workers in the Southwest have a lower LFP rate than Anglos (Grebler, et al., 1970: 20-21), and foreign-born Mexican Americans experience still lower LFP levels than Mexican Americans of native parentage (Grebler, et al., 1970: 206). In the urban areas of the Southwest in 1960, Mexican Americans had a slightly higher LFP rate than nonwhites (Grebler, et al., 1970: 206).

U.S. Bureau of the Census (1975a: 12-13) figures for the nation reveal that the 1973 median income of $5,113 for black males was 60 percent of the median income of $8,453 for white males (up from 57 percent in 1967). The ratio of black to white median income was a little higher for black males who worked year-round full-time. In 1973 the median income of $7,953 for black workers was 67 percent of the median income of $11,800 for comparable white male workers (up from 64 percent in 1967).

Spanish-origin workers' incomes also fall far below average. For example, in 1973 the national median income for all families with male heads was $12,847, but for Spanish-origin families with male heads it was only $9,817 (U.S. Bureau of the Census, 1975c: Table 17). The ranking of Spanish-origin income relative to black income fluctuates according to the areal unit examined. The national median income figure of $9,551 for black families with male heads was $266 below the comparable Spanish-origin figure. On the other hand, the metropolitan central city 1973 figures were reversed: the Spanish-origin families averaged $9,847 while the black families averaged $10,641. Of course, these differences in income between the two groups may reflect, in part, differences in the proportion of families with multiple earners.

Other differences associated with being black or of Spanish-origin are considered in conjunction with some of the variables discussed below.

Rural versus Urban Background

Contrary to the beliefs of many public leaders and citizens, studies indicate that American workers who migrate from country to city generally improve their socioeconomic standing (Blau and Duncan, 1967; Lansing and Morgan, 1967; Price, 1969). Even the poorest rural-to-urban migrants are able to surpass financially the level of rural nonmigrants of identical age, educational level, and race (Blevins, 1971).

It has been found, however, that rural migrants to small towns are more successful in achieving a higher socioeconomic standing than are migrants to the large cities (Blau and Duncan, 1967; Rieger, 1972). And while even the poorest migrants to the city make some gains, they still find many barriers in the ghetto that prevent satisfactory employment (Schwarzweller, et al., 1971: 123-124).

When the occupational status of males raised on the farm is compared with the status achieved by males with nonfarm backgrounds the statistics reveal that the latter group is more successful (Reiss, et al., 1961). The differences in achievement levels of the two groups appear to be caused by differences in their educational attainments (Blau and Duncan, 1967: 290-292; Haller, 1968; Hathaway, et al., 1968: 150).

Featherman's (1971) research suggests that residential background affects the socioeconomic achievements of metropolitan workers in the following way. A white male with farm or rural rearing rather than an urban background is more likely to start out with two serious handicaps: (1) a father with a relatively low occupational status; and (2) a large number of brothers and/or sisters. These constraints lower the rural male's educational attainment, which, in turn, inhibits his occupational success. Featherman's (1971: 107) results show that "when the father's occupational status, size of the family of origin, and years of schooling completed are controlled statistically, the residential variable has no direct, net effects on successive occupational and income career achievements."

Duncan (National Manpower Conference, 1968: 100) argues that a majority of the farm migrants (not including racial and ethnic minority populations and Appalachian whites) in the city actually do "better than the urban native, providing you consider urban natives who are comparatively disadvantaged in terms of socioeconomic status of their families."

Ritchey's (1974) study of urban poverty and residential background revealed that white rural-urban migrants to central cities are living under poverty conditions more often than white indigenous urbanites. However, poverty decreases among white rural-urban migrants as duration of central city residence increases. Additionally, poverty is lower among rural migrants with urban experience prior to their current residence. But for blacks, Ritchey found that rural-urban migrants to the central city and the central city population of urban origin have similar rates of poverty. He suggests that the impact of rural origin in retarding achievement (beyond the poverty level) is preempted by the handicap of being black. Further support for his interpretation is provided by the lack of any association between duration of urban residence and poverty for blacks.

Some other studies, however, suggest that at least Southern rural blacks who migrate to Northern and Western cities are more successful than the blacks who were born and raised in these cities. (For ease of presentation the term "North" will also include the West in the rest of the discussion on this group of studies.) In 1970, 32 percent of all blacks living in the North were of Southern birth, and in 1960 the majority of black adults in the North were originally Southerners. Black migrants from the South are quite likely to have come from a farm or small town while most Northern-born blacks have always lived in cities. Despite the widely held assumption during the 1960's that a disproportionate number of Southern migrants to the North were on welfare, several studies (after standard demographic controls are applied and in some cases even without such controls) report higher unemployment and welfare rates for Northern-born blacks (see Tables 34 and 37 in Bowles, et al., 1973, as well as the findings in Bacon, 1971; Masters, 1972; Cutright, 1974; Long, 1974; Long and Heltman, 1975).

Research by Lieberson and Wilkinson (1976: 199-224) drawn from 1960 census data shows that Southern-born black males living in the North have higher LFP rates than Northern blacks of Northern origin, despite the fact that the latter men have more years of schooling and some tendency to be in higher-status occupations. Compared with the Southern migrants, the Northern men have a lower proportion who were ever married, and if married, fewer have their wives present. For male workers, family stability is associated with higher LFP. But even after this advantage is taken into account, the work rates for the Southern migrants are generally higher than those for the Northern-born blacks. Despite the educational and occupational advantages enjoyed by Northern-born blacks, Lieberson and Wilkinson find that there is virtually no difference in income between the Northerners and the migrants from the South. In fact, among those with relatively little education (controlling for age and occupational differences), Southern migrants earn considerably more than Northerners.

This type of evidence on migrant-nonmigrant differences in the North is reflected in the 1974 Manpower Report of the President which suggests that:

> . . . the problems of blacks in big cities are more than just the adjustment problems of immigrants. Rather, it appears that the high rates of unemployment and withdrawl from the labor force on the part of blacks in the North arise as much from conditions in northern cities as from conditions in the rural South. The solution to these problems, therefore, seems to lie in the northern cities themselves. Manpower programs directed at these urban dilemmas will have to grapple with the apparent "adjustment" problems of nonmigrants as well as migrants (U.S. Office of the President, 1974: 98).

The literature is contradictory regarding the attitudes of white rural-bred manual workers toward working in urban industry and the resulting consequences for their labor force participation rates. One position is that rural people leave their homes and obtain work in the city only because the technological and economic changes in agriculture have forced them off of the farms and out of the small towns. Having been socialized for a rural environment, they find urban factory life restrictive, bureaucratized, and alienating, with the result that they are frequently absent from work and unemployed (Mayo, 1945).

A second position hypothesizes that rural people, when given the opportunity, happily leave their home communities to obtain employment in urban industry. They feel that the gains they make in income and leisure time far outweigh the advantages (e.g., work autonomy) they lose by giving up farm employment (Schwartzweller, et al., 1971). Consequently, they are willing to adapt to the discipline and other dimensions of the factory social system, quickly becoming reliable, committed workers with low absentee rates and unemployment rates, comparable in accomodation to the levels achieved by urban-reared employees. (Form, 1971; Whyte, 1955: 42.)

Schwarzweller and his associates (1971) have shown that white rural-to-urban migrants from Appalachia are able to make the personality and social adjustments to an industrial work environment because of the assistance of a supportive kin network and considerable knowledge of the job situation they will be facing. However, even among these migrants of modest educational and income background there is a class structure, and those of higher social status are able to achieve greater occupational success.

Education and Race

As indicated in some of the discussion on farm-nonfarm background, educational attainment is often an important predictor of occupational success. Its influence, however, can be altered by various conditions. For blacks, labor market success does not correspond very closely to variations in relative educational attainments (Bergmann and Lyle, 1970; Friedlander--cited in U.S. Office of the President, 1971: 93; Taylor, 1968; Michelson, 1968, 1969; Weiss, 1970). Hanoch (1967) found that blacks universally realized lower income returns from education than whites and that these returns were negligible for the 9-11 years of school category. Harrison's (1971, 1972) data showed low or insignificant income returns from education for blacks outside of as well as in the ghetto, while ghetto and nonghetto whites, in contrast, realized significant returns to educational investment. Increases in educational attainment bring lower income gains for Mexican Americans in the Southwest than for Anglos, and the income differential tends to widen as educational attainment increases (Grebler, et al., 1970: 19-20). However, Mexican-American male workers have higher earnings than blacks, when controlling for educational attainment. In other words, the same amount of schooling has paid off better for Mexican Americans than for blacks.

Bowen and Finegan (1966) discovered a positive relation between years of school and labor force participation for both whites and nonwhites, but the level was lower for nonwhites than for whites. In a study by Hill (1971) both white and nonwhite nonpoor males (family heads, 25-54 years old who worked at least one week during the previous year) exhibited a positive relationship between educational attainment and LFP. For poor males, however, it was a different situation. The whites showed a positive relationship between years of schooling and LFP up to grade 8 only. After this level, LFP decreased. For the black poor, years of schooling did not have a significant effect on labor force participation at all.

Blau and Duncan's (1967: 210) analysis indicated that educational attainment led to greater upward mobility for white males than for black males (except college-educated blacks).

Education and the Dual Labor Market

The existence of a dual labor market which stratifies workers into primary and secondary jobs is an important reason why greater attainment does not always lead to higher income. In contrast to primary jobs, secondary jobs are those in which practically no skill is required. They are not a part of a structured system of upward mobility. They provide low pay, may be part-year and/or part-time, non-union, and have few, if any, fringe benefits. (For a summary and discussion of dual labor market theory see Gordon, 1972: Chapter 4; also see Bluestone, et al., 1973; Chapter 2.) Gordon (1971: Chapters 3 and 5) found that increases in educational attainment provide little or no increases in income to secondary workers throughout their careers. For workers in these jobs, education "makes little difference, either in their manifest productivities or in their (negligible) chances for promotion (Gordon, 1972: 117)." A detailed description of the dynamics of the secondary labor market with respect to black workers is presented by Liebow (1967).

Education and Personality

Some writers believe that those who do better in school, and therefore end up with more years of schooling may fare better in the labor market, not primarily as a result of their educational achievement but because they have the personalities most suitable to certain kinds of jobs in large organizations (Berg, 1969; Gintis, 1969 and 1971; Gordon, 1972: 121). Gordon (1972: 121) suggests that "since it is presumably much more difficult to change personality structures than to change reading scores, one cannot very blithely assume that increasing the educational achievements of the poor will automatically increase their incomes." (See the study by Purcell and Cavanagh, 1972, for a description of the social adjustment problems experienced by black employees in primary jobs).

Education and Age

It is well known that older men and youths supply less labor than prime-age workers (Cohen et al., 1970: 28-31). Research on the relationship of education to age shows that youths who graduate from high school participate more than nongraduates even with controls on age (Cohen, et al., 1970: 147). Prime-age males (25-54 years) with higher educational achievement are more likely to be employed than those with a lower educational level, but there is not a great deal of difference between those in educational categories 9-11 years of school on up the scale (Bowen and Finegan, 1966). Finding that well-educated workers are less likely to reduce their labor force participation with age, Cohen and his colleagues (1970: 145) suggest that the well-educated are less likely to have outdated skills, be unable to meet the physical requirements of their work, or have a desire to quit their type of work role.

MDTA-Institutional Training

An institutional training program was initiated by the Manpower Development Training Act of 1962 to assist workers who had been displaced by technological change. In time, however, it was altered to include those who were disadvantaged and who would be able to benefit from training (Twentieth Century Fund, 1971: 116-117). Because we have postulated hypotheses about the effectiveness of job training programs on workers who were interviewed in 1970-71, our discussion about the effectiveness of job-training programs refers particularly to the years preceding the Census Employment Survey.

During the 1960's the MDTA training program was able to help some groups more than others. For example, institutional training generally led to higher labor force participation and income levels for whites than for nonwhites (Gurin, 1970: Table 51; Levitan and Mangum, 1967: Part 2; Mangum, 1968: 93-104).

Sometimes those who had higher income levels before becoming unemployed and being retrained experienced a decrease in income immediately after training because they started at the bottom of the ladder in the new job (Mangum, 1968: 102).

Some have argued that MDTA institutional training had no direct effect on raising wages (Main, 1968), occupational status (Doeringer, et al., 1969; Harrison, 1972), or labor force participation (Thurow, 1968). For example, there is evidence that participants in the programs were a select group--the cream of the unemployed--and therefore were more likely to show success anyway (Somers, 1968). Solie (1968: 225) saw the main benefit of training as facilitating a rapid return to gainful employment rather than upgrading the employment level. In other words, its main function was as a screening device. (See Hammermesh, 1971; Page, 1964 Solie, 1968; Somers, 1968; and Mangum, 1967 for serious questions raised about the relevance of early studies that seemed to show in cost-benefit terms that training was successful. See Sewell, 1967; Ribich, 1968; Mills, 1968; and Goldfarb, 1969 for methodological questions about the usefulness of cost-benefit analysis for these purposes. See Wachtel, 1971; and Harrison, 1972 for political factors which may have caused some of the ineffectiveness of institutional training programs in raising incomes.)

Doeringer and his associates (1969) found in their study of some programs in Boston that training was most successful when the program was tied directly to a particular job upon graduation.

General experience and specific on-the-job-training (OJT) are viewed by some writers as important for raising a worker's marginal productivity (Becker, 1964; Mincer, 1962, 1971; Reder, 1969; Rosen, 1971; and Thurow, 1969), and increased productivity, theoretically, should help to raise a workers employability and income. Mangum (1968: 96-97) found that disadvantaged workers (black and white) who received MDTA on-the-job training had higher labor force participation rates than those disadvantaged workers without OJT. They also showed higher LFP rates than those who had MDTA institutional training (Mangum, 1968: 96-97).

Doeringer and Piore (1971: 200) argue that OJT is more effective than institutional training because OJT gives the worker a direct link to a job. The structure of the internal labor market makes it difficult for workers outside the enterprise to gain direct access to many jobs utilizing skills they have been trained to perform (Doeringer and Piore, 1971: 200). Unfortunately, it has been difficult to get more advantageous OJT and work experience for disadvantaged workers (Cohn, 1971; Freedman, 1969; and Shelley, 1970). Separate promotion ladders for whites and non-whites is often the case (Alexander, 1970: 25). And OJT does not increase the productivity nor the income of a disadvantaged worker if he continues to work in the secondary labor market (Gordon, 1971 and 1972: 123-124).

In December, 1973, the MDTA was superceded by the Comprehensive Employment and Training Act (CETA) which is an effort to decentralize manpower program resources and operations to State and local prime sponsors. CETA is based on the premise that State and local prime sponsors can respond more effectively than the National Government to the needs of individuals and communities within their jurisdictions. Currently, however, the Federal responsibility for assisting in these efforts has not diminished. For example, title III of CETA makes provision for the Department of Labor to provide additional manpower services for certain disadvantaged groups that are in particular need of these services, including Indians, migrants, youth, offenders, persons of limited English-speaking ability, older workers, and others (U.S. Office of the President, 1975: 84-87).

During 1974 the shifting of title I program responsibilities from the National level to State and local governments had not generated any dramatic changes in the "mix" of manpower services from that existing under previous legislation. Early enrollment trends indicated that substantial proportions of title I participants had entered institutional training and work-experience programs, rather than OJT or public service employment (U.S. Office of the President, 1975: 80-81).

Job Corps

The Jobs Corps program was initiated by the Economic Opportunity Act of 1964, but now it is operated directly by the Department of Labor under CETA's title IV (U.S. Office of the President, 1975: 98-100). This is a job training and basic education program that focuses on young people who are very poor, unemployed or underemployed, and poorly educated. A majority of the enrollees come from broken homes and have lived in substandard housing. In 1971 Levitan and Taggart (Twentieth Century Fund, 1971: 118) wrote:

> Follow-up studies suggest that gains in earnings of former enrollees (white and black) were slight in comparison with a control group and that the incidence of unemployment among the blacks was not noticeably affected by the Job Corps experience.

In 1974 the Department of Labor figures show that 94 percent of all Job Corps terminees available for placement received jobs or other types of placements (e.g., returned to regular schoolwork, qualified for other training programs, or entered into the Armed Forces) (U.S. Office of the President, 1975: 99). Because the Job Corps goals include noneconomic outcomes (e.g., responsible habits of health and nutrition, educational achievement, social attitudes, and self-confidence), the program cannot be judged simply in respect to the terminees' short-run gains in earnings. The noneconomic effects of the program on Job Corps enrollees are now being evaluated for the Department of Labor by a private research firm (U.S. Office of the President, 1975: 100).

Neighborhood Youth Corps

Like Job Corps, the Neighborhood Youth Corps (NYC) program was initiated under the Economic Opportunity Act of 1964 but is now administered by the Department of Labor. This program provides work for sixteen and seventeen year old dropouts or youth without jobs for the summer who comes from poor families. These jobs generally have been in the public or nonprofit sector, menial and unattractive, at low wages, with few opportunities for advancement, and with little basic education provided to improve the employability of the participants (Twentieth Century Fund, 1971: 119-123). There is little evidence that these NYC programs contribute significantly to increasing the employability of the participants. This is not surprising, however, since the main goal of this program has been "to keep youths off the street until opportunities or responsibilities increase with age" (Twentieth Century Fund, 1971: 123). It is not likely, therefore, that this program would lead to higher income or labor force participation for participants over nonparticipants. In the long run, however, will they have gained positive work habits and job experience references that might help them?

Age

As males move through the life-cycle their income and employment levels reflect the transition into the world of work and then later into retirement. National figures show that young males (16 to 19 years) have the lowest incomes (U.S. Bureau of the Census, 1975a: Table 53). Incomes rise steadily during young adulthood (20 to 34 years) and reach their peak during the middle years (35 to 54 years). Over the next ten years incomes begin to decline, but for men who are still year-round, full-time workers the decrease is not very great. Then, of course, the figures for age 65 and older show a sharp drop as most men in this category are retired.

Employment levels among older male workers are higher than among younger males, but they are still lower than among prime-age men (see Van Til, 1973: Chapters 3, 5, and 6). Also, long-term unemployment is more common among older men (U.S. Office of the President, 1970: 238, Table A-20).

Marriage and Family Size

The responsibility of supporting a family would appear to provide an incentive for higher labor force participation. (According to Orshansky's (1969) study, each member added to a family increased a family's poverty threshold by about $500.) Indeed, labor force participation is higher for married than nonmarried males (Bowen and Finegan, 1966: 573-575; Cohen, et al., 1970: 144). The average total income for married males with wife present, is higher than the average for males not living with any relatives (U.S. Bureau of the Census, 1975a: Table 52). This difference, however, is influenced by differences in age composition (single males are more likely to be young or old than in the prime working years). In 1970, in 54 percent of the black husband-wife families and 38 percent of the white husband-wife families working wives also contributed to their family incomes (U.S. Bureau of the Census, 1975a: 5, 7).

Goodwin (1972: 115-116), found that outer-city black families who had made it out of the ghetto, often were able to do so only because of the joint income of husband and wife:

> The husbands, with only a tenth grade education on the average, are working at jobs that are not much different from those of men . . . still in the ghetto. The outer-city blacks, however, despite having a high level of insecurity common to poor blacks, have stayed on their jobs. And most important, they have stayed married to women who on the average have an eleventh grade education and bring in almost 30 percent of the family income (Goodwin, 1972: 116).

According to Hill's (1971: 386) findings there is a positive relationship between educational level of the wife and the labor force participation of white male family heads (poor and nonpoor), but no significant relationship for black family heads. Since the evidence is that a wife increases her labor market activity with increases in educational attainment (Cohen, et al., 1970: 77-81), Hill suggests that for white families the husband's and wife's labor market activity are complementary. For blacks, on the other hand, Hill believes that education of the wife does not affect the head's supply of labor, in part, because the black husband's and wife's labor market activity are substitutes (i.e., the more the wife works the less the husband works, and vice versa).

Cohen and associates (1970: 143) found that the contribution to family income by other family members or from sources other than the worker's wages or salary (which they refer to as FILOW) exerts a negative effect on the labor force participation of adult men; however, the effect was greater for single than for married men. (Of course, the cause-effect relationship could also be in the opposite direction: when LFP for an adult male worker decreases, other family members increase their LFP.) They also discovered that high FILOW reduced hours supplied by youths, with young blacks decreasing their participation more than young whites did as FILOW moved from the low to middle categories. They report that "this finding is consistent with the relative income hypothesis in that the middle-income black may feel richer than a middle-income white because of the higher relative position attained within his community. Most earlier studies did not find a negative income effect on youth participation because of the lack of proper controls on other variables" (Cohen, et al., 1970: 143-144).

For the nonpoor, Hill (1971: 383-387) found that family size is related to labor force participation in a positive direction and linear relationship. Family size seemed to be a more important explanatory variable for black than for white nonpoor heads. According to Hill, this difference may result because whites have more assets and capital income to substitute for additional labor force participation. For poor family heads (both white and black) labor force participation increased at a decreasing rate as the number of dependents increased. Hills' coefficients indicate that an additional dependent in a poor family leads to a larger increase in the poor head's labor force participation than it does for the nonpoor. Here again, the difference may be an indication that the poor have no capital income and few assets to use in place of labor income.

Mexican Americans have more children per family than Anglos and nonwhites, with the result that they have a lower income per person than nonwhites, even though nonwhite family heads often have lower earnings than Mexican Americans (Grebler, et al., 1970: 15-17, 19-20).

Job-Seeking Methods

It appears that some disadvantages are not a product per se of one's background or skills, but, instead, result from having inadequate information (McCall, 1970) and using ineffective job-seeking methods. A study by Sheppard and Belitsky (1966) suggests that unemployed blue-collar workers who ask friends and relatives as their principal job-seeking method are most successful at finding a new job. (See Schwartzweller, et al., 1971, for a description of this process with respect to rural-to-urban migrants from Appalachia.) Unions ranked second in effectiveness, but the number using them to obtain jobs was small. The State Employment Service and direct application to the company followed in ranking, but they were far less effective than using friends and relatives. Checking newspapers as a principle job-seeking method was found to be least effective of the major job-seeking techniques.

Blacks used friends and relatives more than whites did in the Sheppard and Belitsky study. Blacks also used welfare and similar organizations more frequently than did whites.

Some argue, however, that black unemployment does not result at all from a lack of information about jobs. Instead, a realistic appraisal of the paucity of actual opportunities effectively limits the search of a majority of blacks (Gordon, 1972; Kidder, 1968).

60

Doeringer and his associates (1969) concluded from their Boston study that the neighborhood job information and referral centers were providing the disadvantaged with information they were already getting through "informal" channels, and therefore were not improving the employment prospects of those in the ghetto.

Health

Obviously, poor health is more likely to lower a worker's employment and income level than is good health. Mushkin (1962: 130) suggests that while there are many interrelations between the two, good health care, just like a good education, can be viewed as an investment, and that often the income return on investment in health is mistakenly attributed to educational attainment. Hill (1971: 383) provides some evidence for the hypothesis that the inability to finance adequate health care is likely to cause the poor to lose more time from work for reasons of ill health than the nonpoor. For both white and nonwhite male workers, health problems had a negative effect on the labor force participation of those in the poor category, while for nonpoor workers, health problems were not a significant independent determinant of labor force participation.

Occupation

The common assumption that white-collar workers earn more and are unemployed less than blue-collar and service workers is generally supported by the national statistics, but there is one major exception. U.S. Bureau of the Census (1975a: Table 59 and 69) figures for male workers show, as expected, that professionals and managers receive the highest incomes, but next in ranking are craftsmen and kindred workers. Next are sales and clerical workers followed by operatives, service workers, and nonfarm laborers. Farmers and farm laborers have the lowest levels.

A similar picture appears for unemployment rates of experienced workers in the various occupational categories. According to Current Population Survey figures for 1970 (U.S. Office of the President, 1975: 235, Table A-21), professionals and managers had the lowest rates and farmers and farm laborers came next. Craftsmen and kindred workers had slightly lower rates than sales and clerical workers. Service workers followed next, and operatives and nonfarm laborers had the highest percentage unemployed.

Industry

We have already discussed how the problem of poverty relates to the imperfect labor market in our society. Differences in wage rates are not simply due to differences in the skills and competencies of the work force and the information available to job-seekers. Some of the differences in earnings result from differences among industries in their ability to pay adequate wages. As a result of institutional barriers to mobility, certain workers are forced to remain in the low-wage industries primarily because of their race, sex, class, or age rather than because of their skills, work attitudes, and other human capital factors.

Using data from the 1967 Survey of Economic Opportunity, Bluestone, Murphy, and Stevenson (1973: 192-193, Table A-14) present the following national rankings of industries according to the percentages of low-wage white and black workers within each industry:

White Males

Rank	Industry	Percent of Industry Low-Wage
1	Communication	4.6
2	Mining	7.7
3	Public Administration	12.9
4	Manufacturing Durables	14.1
5	Utilities and Sanitary	14.3
6	Transportation	15.4
7	Finance, Insurance and Real Estate	16.1
8	Construction	18.7
9	Manufacturing Non-Durables	21.1
10	Wholesale Trade	21.3
11	Business and Repair Service	26.8
12	Professional and Related	27.6
13	Retail Trade	40.6
14	Personal Service	44.3
15	Entertainment and Recreation	50.0
16	Agriculture, Forestry, and Fisheries	80.7
	All Industries	21.2

Black Males

Rank	Industry	Percent of Industry Low-Wage
1	Public Administration	18.5
2	Manufacturing Durables	32.7
3	Communication	33.3
4	Transportation	34.2
5	Utilities and Sanitary	51.0
6	Construction	52.0
7	Manufacturing Non-Durables	56.0
8	Professional and Related	58.6
9	Business and Repair Service	61.4
10	Finance, Insurance, and Real Estate	65.9
11	Wholesale Trade	67.2
12	Retail Trade	73.3
13	Entertainment and Recreation	77.8
14	Personal Service	82.0
15	Mining	88.9
16	Agriculture, Forestry and Fisheries	100.0
	All Industries	51.3

According to the Employment and Training Report of the President 1976 (U.S. Office of the President, 1976: 296, Table C-3) the national gross annual average weekly earnings of production or nonsupervisory workers (male and female) on private payrolls by industry division were as follows in 1970:

Rank	Industry	Weekly Earnings
1	Contract Construction	$195
2	Mining	164
3	Transportation and Public Utilities	156
4	Manufacturing Durable Goods	143
5	Manufacturing Non-Durable Goods	120
6	Finance, Insurance, Real Estate	113
7	Services	97
8	Wholesale and Retail Trade	96
	Total Private	119

The unemployment rates for experienced wage and salary workers (male and female) in the major industrial groups according to Current Population Survey figures for 1970 (U.S. Office of the President, 1975: 236, Table A-22) rank as follows:

Rank	Industry	Unemployment Rate
1	Construction	9.7
2	Agriculture	7.5
3	Manufacturing Durable Goods	5.7
4	Manufacturing Non-Durable Goods	5.4
5	Wholesale and Retail Trade	5.3
6	Service Industries	4.7
7	Transportation and Public Utilities	3.2
8	Mining	3.1
9	Finance, Insurance, Real Estate	2.8
10	Government	2.2
	Total	4.8

64

Chapter 3

STUDY DESIGN

In 1974 the nation's metropolitan areas contained 68 percent of the total population and 60 percent of the poverty population (U.S. Bureau of the Census, 1976: Table 8). The majority (57 percent) of the metro residents were living in suburban areas, but the majority (60 percent) of the metropolitan poor were living in the central cities (U.S. Bureau of the Census, 1976: Table 8). Low-income residents can be found throughout the central cities, but some sections of the cities house disproportionate numbers of the disadvantaged. These urban "poverty areas" or "low-income areas" are defined by the Census Bureau as census tracts in which 20 percent or more of the population was below the poverty level in 1969 (U.S. Bureau of the Census, 1975b: 155-156). Nationally, the poverty rate in the central-cities' low-income areas (32 percent) was over three times that in the rest of the central-cities' areas (about 9 percent) in 1973 (U.S. Bureau of the Census, 1975b: Table 9).

The residential segregation of blacks and their high rate of poverty are major factors in the formation of low-income districts in central cities. The 1973 national figures for central cities show that almost one out of three blacks is poor whereas less than one out of ten whites is in this category (U.S. Bureau of the Census, 1975b: Table 9). About three-fourths of the low-income blacks are concentrated in the poverty areas, while less than one-third of the low-income whites live in these areas. In addition, almost half of the blacks who are not poor also reside in the poverty-area tracts. This contrasts sharply with the white pattern which shows only one in ten nonpoor city residents located in the poverty neighborhoods. As a result of these differences, blacks make up 57 percent of the poverty-area population even though they are only 22 percent of the total central-city population.

While the aggregated figures show that the majority of poverty-area residents are black, the data for individual cities indicate cases where other groups are more prominent in the low-income areas. For example, in the San Antonio poverty area the Spanish-origin people are the greater part of the population. Like the black population, a disproportionate number of the Spanish-origin people are residentially segregated and in poverty. In 1974 about 23 percent (2.6 million persons) of the Spanish-origin population in the United States was below the poverty level, while the rate for the total white population was about 9 percent (U.S. Bureau of the Census, 1976: 1).

In addition to blacks and whites, members of other racial groups (American Indians, Chinese, etc.) reside in some of the poverty areas. Sometimes these groups are highly concentrated in a city's poverty area, but usually their numbers are relatively small in comparison with the white or black populations. In 1974 persons in the "other" racial category were less than 2 percent of the 12.9 million people living in central-city poverty areas across the nation (U.S. Bureau of the Census, 1976: Table 9).

By choosing to study male workers residing in central-city poverty areas, we were able to draw upon a rich source of socioeconomic data--the Census Employment Survey (see U.S. Bureau of the Census, 1972). Conducted during the last half of 1970 and the first few months of 1971, this survey of poverty areas in over 50 central cities (and also 7 rural areas) gathered extensive information on such subjects as employment, unemployment, income, training for work, job-seeking methods, job tenure, residential mobility, and health problems. By selecting the poverty areas in two major Midwest cities (Chicago and St. Louis) and in one Southwestern city (San Antonio) for our study, we obtained sizable samples of black, Spanish-origin, and Anglo workers.

By sampling all male workers residing within the selected poverty areas we included not only low-income workers, but also those with more satisfactory incomes. Yet, by excluding metropolitan workers living outside the poverty areas, we eliminated most of those in the higher income brackets (above $11,000 in 1969). We believe that this sampling procedure provided us with a representative cross-section of workers for making longitudinal inferences about the potential improvement in income for those workers in our study who were below the poverty line.

Analysis of the poverty areas also provides information about ecological districts of special interest to those who work to maintain the viability of our central cities. Findings from this study about the socioeconomic dimensions of so-called "slum" areas should help city leaders in their efforts to preserve and renew these neighborhoods.

Samples and Areal Units

As already indicated, our samples consist of male workers, 16 to 64 years old, residing in the poverty areas of Chicago, St. Louis, and San Antonio. Moreover we have selected only those workers who were employed at least one week in 12 months preceding the survey. In our analysis we have excluded from our sample those workers who were in school or the Armed Forces at any time while looking for work or not working during the prior 12 months. Persons who were members of the Armed Forces at the time of the Census Employment Survey (CES), were not interviewed (they were, however, interviewed in the 1970 Census of Population). Also, the CES counted unmarried students living away from home as members of their parents' household (while in the 1970 Census of Population they were counted as members of the household or dormitory in which they were residing).

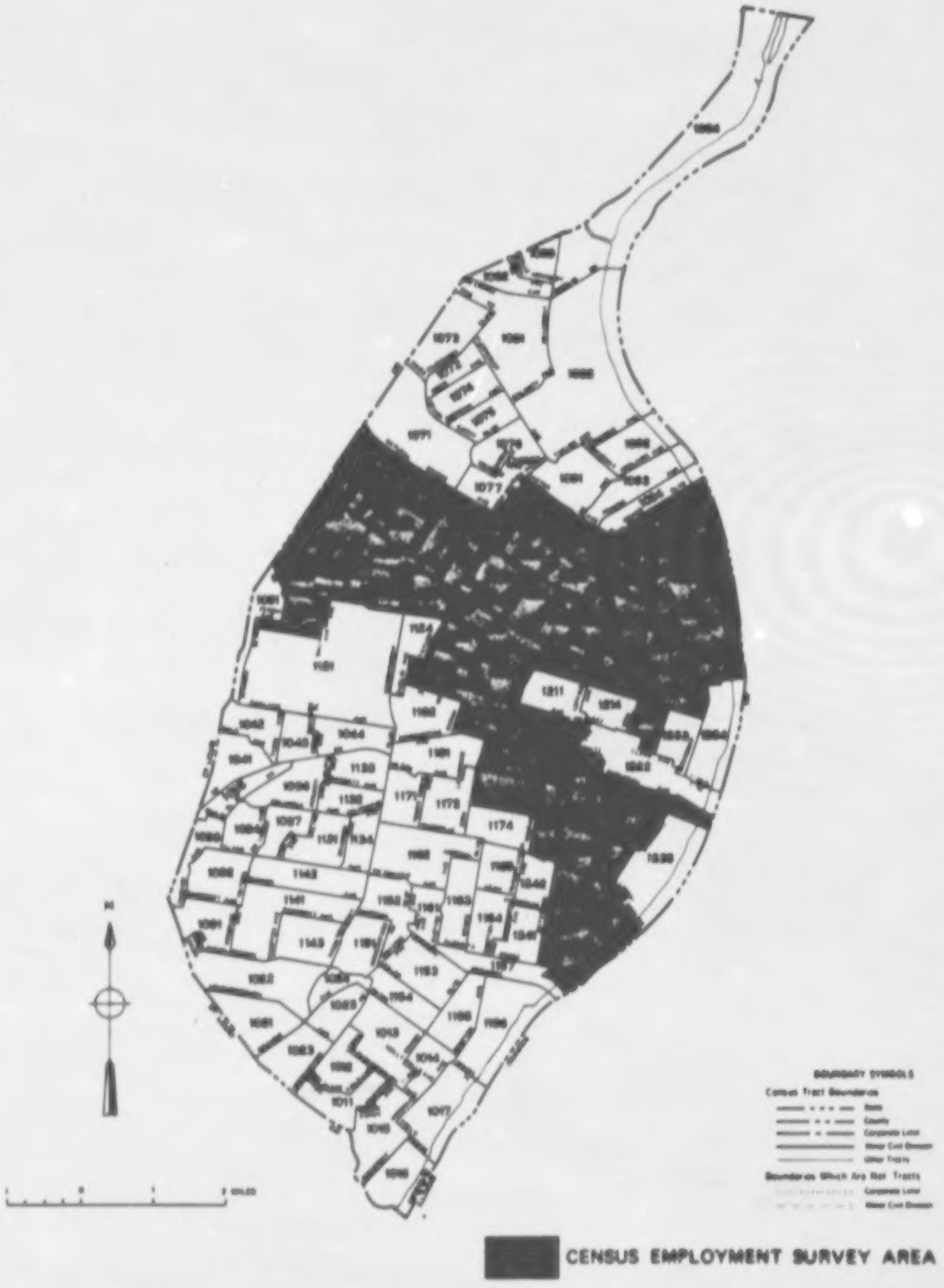
Because the income figures from the 1970 Census of Population were not to be available until 1972, they could not be used to determine the poverty areas for the CES, the data source for this study. Therefore, the areal boundaries used by the Census Bureau to report more recent information about poverty-area populations, which we presented at the beginning of this chapter, are not completely identical to the poverty-area boundaries used in the CES.

The CES poverty areas were defined from information generated by the Census Bureau's ongoing research program to delineate areas with large numbers of poor people. This work was an extension of the Bureau's previous selection of poverty areas based on 1960 census data for the 101 Standard Metropolitan Statistical Areas (SMSA's) with a 1960 population of 250,000 or more persons. These previously delineated areas were altered on the basis of recent data acquired by the Bureau's staff about such factors as welfare programs, juvenile delinquency, illegitimate births, and housing conditions. After making these preliminary designations of the CES poverty areas, the Bureau sent their findings to local experts (such as the local person responsible for defining a city's census tracts, or to a city's planning commission) for review. The recommendations received were further scrutinized by the Bureau's staff according to a set of guidelines designed to assure some uniformity across the country. Therefore, the final definitions of the areas selected for the CES "represent a synthesis of previous area designations, 1960 Census and other more recent socio-economic data, and the views of local knowledgeable agencies" (U.S. Bureau of the Census, 1971, PHC (3)-50: VII; also see, Winard, 1970 and 1971).

The various poverty area designations by the Bureau of the Census have been defined in terms of census tracts. For the Census Employment Surveys in St. Louis and San Antonio, a single area consisting of all of the census tracts meeting the appropriate criteria was selected for each city. As seen in the maps, each of these two poverty areas is composed of a set of contiguous tracts. Also, note that in San Antonio

ST. LOUIS, MO. MAP 1

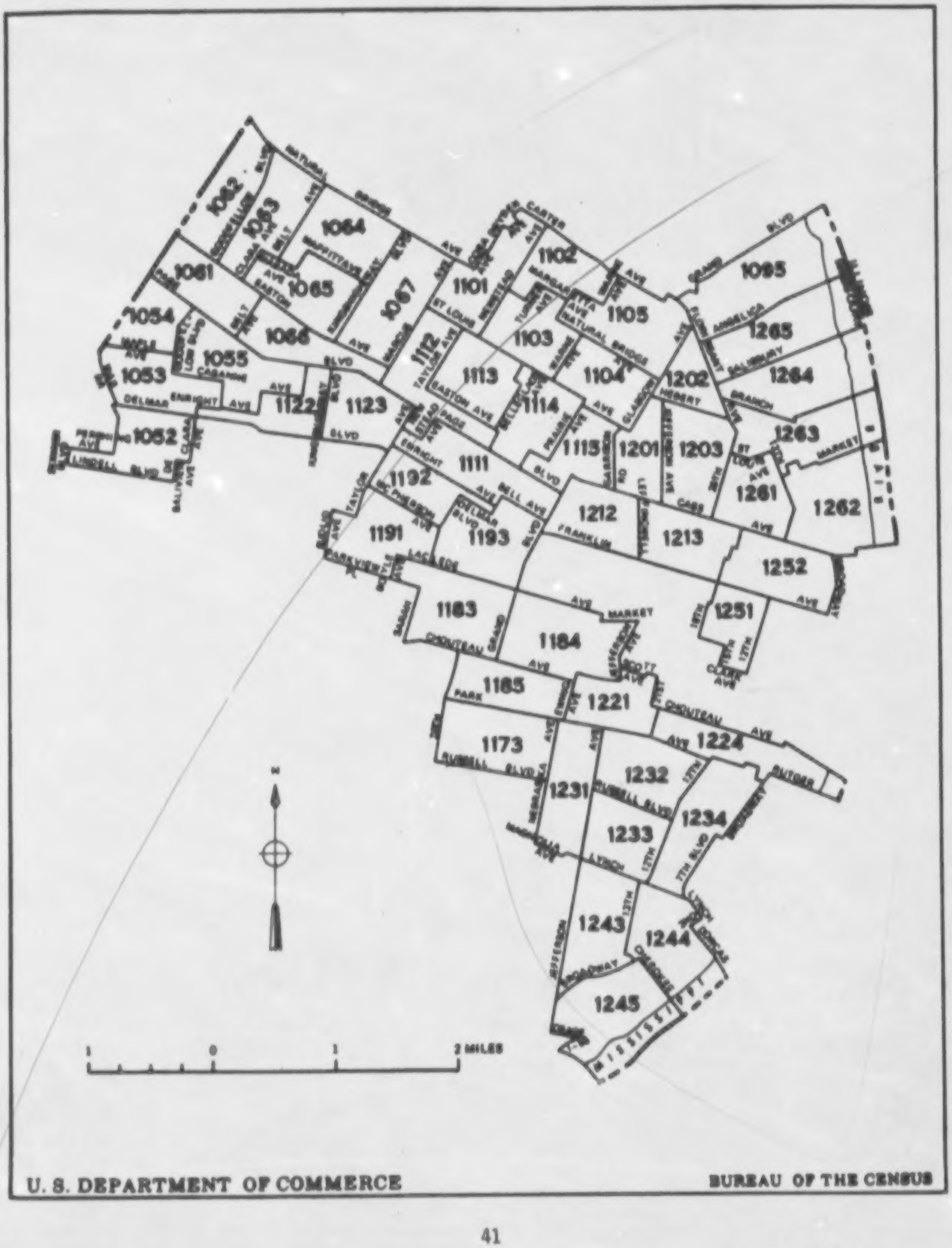
City Showing Census Employment Survey Area


BOUNDARY SYMBOLS
Census Tract Boundaries
State
County
Corporate Limit
Minor Civil Division
Other Tracts
Boundaries Which Are Not Tracts
Corporate Limit
Minor Civil Division
CENSUS EMPLOYMENT SURVEY AREA

U. S. DEPARTMENT OF COMMERCE **BUREAU OF THE CENSUS**

BEST COPY AVAILABLE

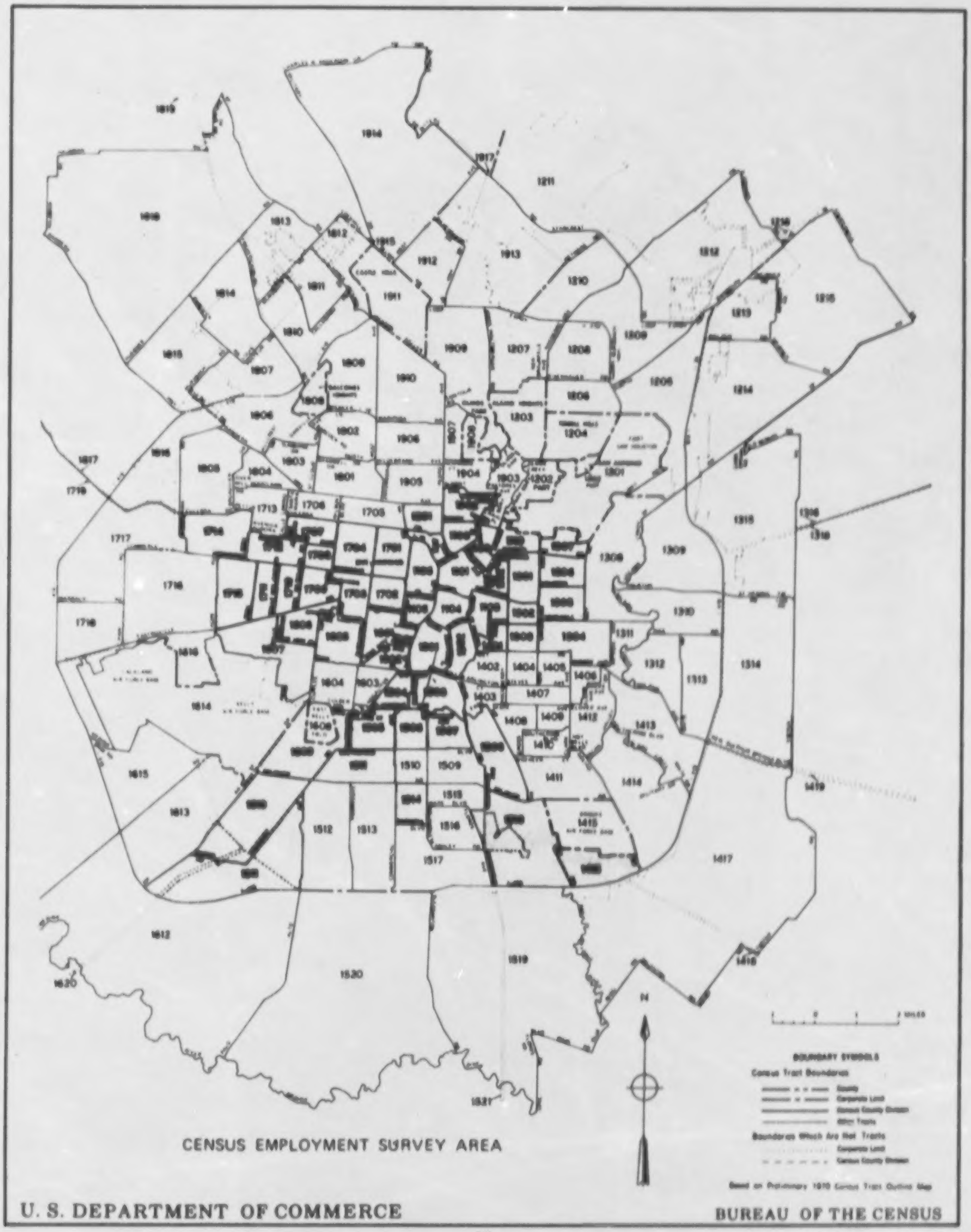
Census Employment Survey Area


1062
1063
1064
1061
1065
1067
1054
1066
1055
1053
1052
1122
1123
1112
1101
1102
1105
1103
1113
1114
1104
1202
1095
1265
1264
1263
1262
1115
1201
1203
1261
1111
1192
1191
1193
1212
1213
1252
1251
1183
1184
1185
1221
1224
1173
1232
1231
1233
1234
1243
1244
1245
NATURAL BRIDGE
CARTER
GRAND BLVD
ST LOUIS
EASTON AVE
DELMAR
ENRIGHT AVE
LINDELL BLVD
TAYLOR AVE
PAGE
BELL AVE
FRANKLIN
CASS
MARKET
CHOUTEAU AVE
PARK
RUSSELL BLVD
LYNCH
BROADWAY
JEFFERSON
GRAND
ANGELICA
SALISBURY
BRANCH
HEBERT
GLASGOW
LACLEDE
PARKVIEW
SCOTT AVE
PESTALOZZI
MISSISSIPPI
MISSISSIPPI RIVER
N
1
0
1
2 MILES

U. S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

BEST COPY AVAILABLE

City Showing Census Employment Survey Area


1811
1814
1211
1913
1912
1911
1210
1909
1207
1208
1206
1203
1204
1215
1214
1315
1309
1308
1310
1312
1313
1314
1402
1404
1405
1406
1403
1407
1408
1409
1410
1411
1412
1413
1414
1415
1417
1418
1419
1510
1509
1512
1513
1516
1517
1519
1520
1521
1604
1603
1612
1613
1614
1615
1616
1620
1705
1706
1713
1716
1717
1718
1719
1802
1803
1805
1806
1807
1809
1810
1901
1903
1904
1905
1906
1907
1908
1910
1201
1202
1301
1311
1316
CENSUS EMPLOYMENT SURVEY AREA
N
0
1
2 MILES
BOUNDARY SYMBOLS
Census Tract Boundaries
County
Corporate Limit
Census County Division
Other Tracts
Boundaries Which Are Not Tracts
Corporate Limit
Census County Division
Based on Preliminary 1970 Census Tract Outline Map

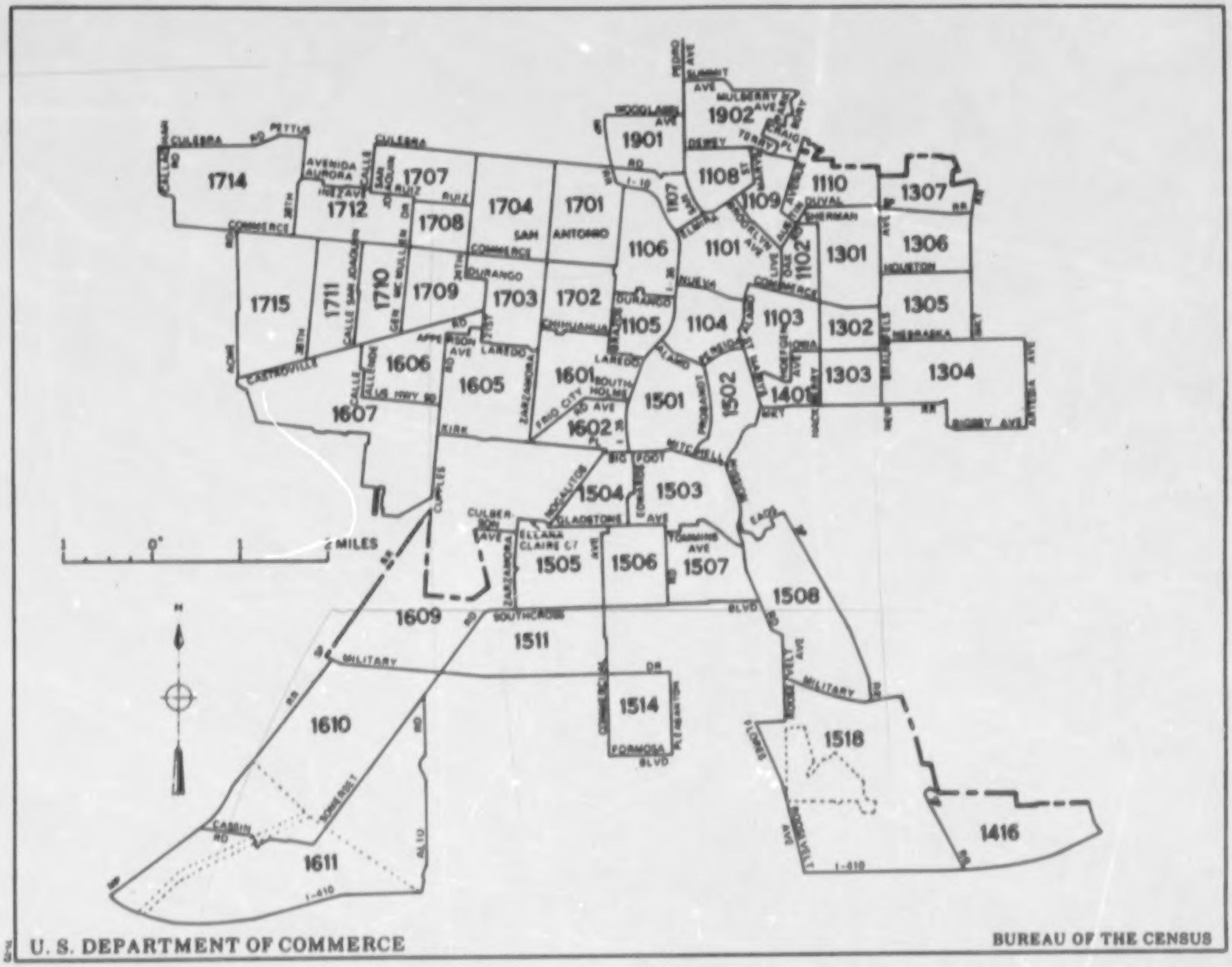
U. S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

BEST COPY AVAILABLE

SAN ANTONIO, TEX.

Census Employment Survey Area

MAP 4


1901
1902
1108
1109
1110
1307
1306
1305
1304
1303
1302
1301
1107
1106
1101
1102
1103
1104
1105
1401
1501
1502
1503
1504
1505
1506
1507
1508
1511
1514
1518
1416
1601
1602
1605
1606
1607
1609
1610
1611
1701
1702
1703
1704
1707
1708
1709
1710
1711
1712
1714
1715
CULEBRA
PETTUS
AVENIDA AURORA
INEZ AVE
RUIZ
COMMERCE
SAN ANTONIO
DURANGO
NUEVA
CHIHUAHUA
LAREDO
CASTROVILLE
US HWY 90
KIRK
TRIO CITY
SOUTH HOLMES
MITCHELL
GLADSTONE
SOUTHCROSS
MILITARY
FORMOSA BLVD
HOUSTON
NEBRASKA
RIGSBY AVE
DUVAL
SHERMAN
WOODLAWN AVE
MULBERRY AVE
DEWEY
SUMMIT AVE
I-10
I-410
CASSIN
SOMERSET
MILES
N

U. S. DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

there are some non-poverty tracts almost completely surrounded by poverty tracts.

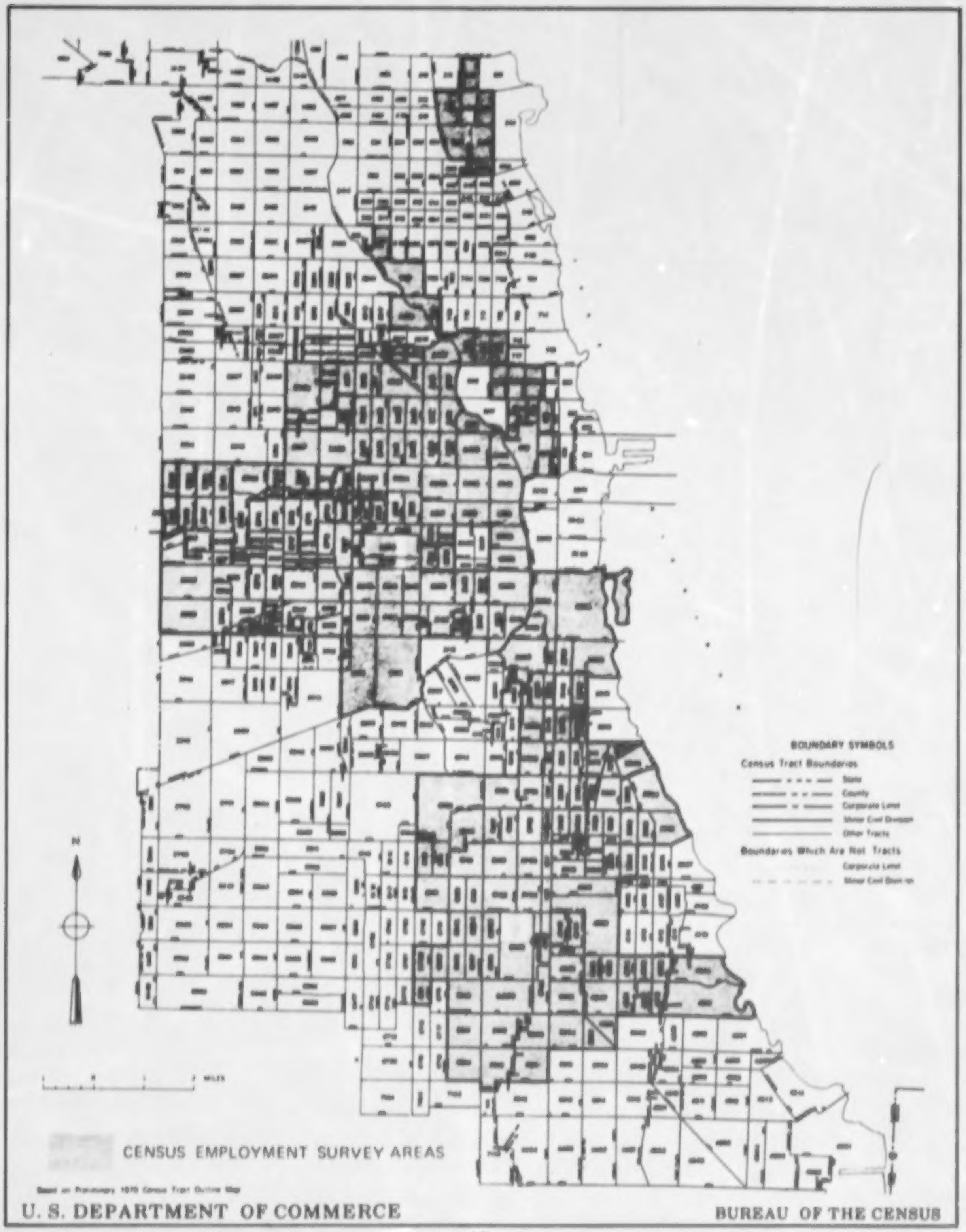
For the Chicago CES, two sets of tracts were designated as poverty areas. As shown in the Chicago maps, Area I includes the poverty tracts on the north and west sides of the city and Area II covers the poverty tracts on the south side. The Area I set of tracts is divided into two separate groups of contiguous tracts. (Local residents refer to the area encompassed by the smaller group of poverty tracts at the top of the map as the "Uptown" area.) Also, both Area I and Area II completely surround some non-poverty neighborhoods.

The Census Employment Surveys began shortly after completion of the 1970 decennial census operations in each city. Most of the members of the CES data collection staff (area supervisors, crew leaders, and interviewers) had held similar positions in the 1970 census and therefore had some data-gathering experience. As shown below, there were some differences, particularly between Chicago and the other cities, in the interview periods for the CES:

	Date Interviewing Began	Date Interviewing Completed
Chicago I	October 5, 1970	February 19, 1971
Chicago II	October 5, 1970	February 19, 1971
St. Louis	August 17, 1970	November 25, 1970
San Antonio	August 3, 1970	October 29, 1970

CHICAGO, ILL. MAP 5

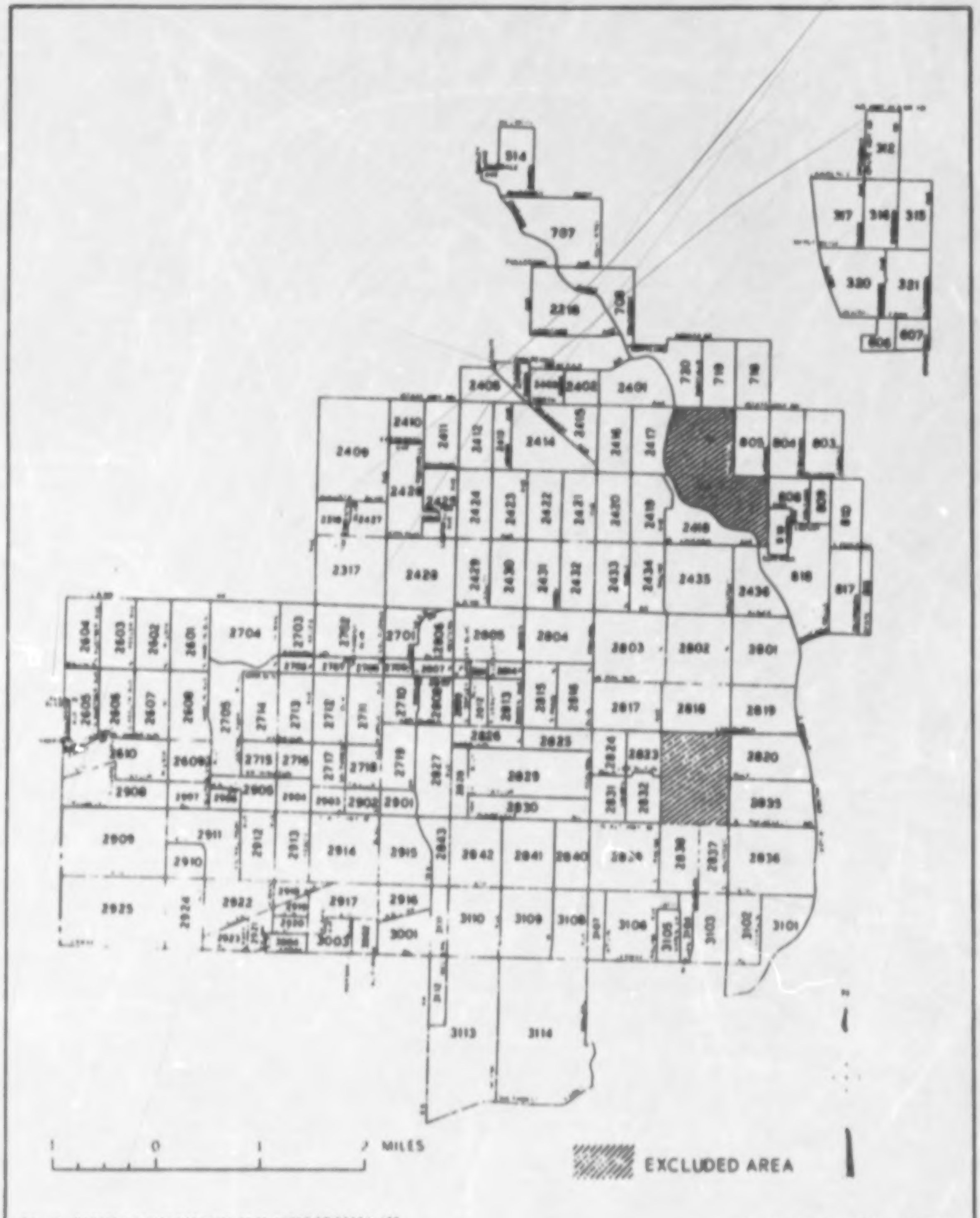
Portion of City Including Census Employment Survey Area


BOUNDARY SYMBOLS
Census Tract Boundaries
State
County
Corporate Limit
Minor Civil Division
Other Tracts
Boundaries Which Are Not Tracts
Corporate Limit
Minor Civil Division
N
MILES
CENSUS EMPLOYMENT SURVEY AREAS
Based on Preliminary 1970 Census Tract Outline Map
U. S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

BEST COPY AVAILABLE

CHICAGO, ILL. **MAP 6**

Census Employment Survey Area I



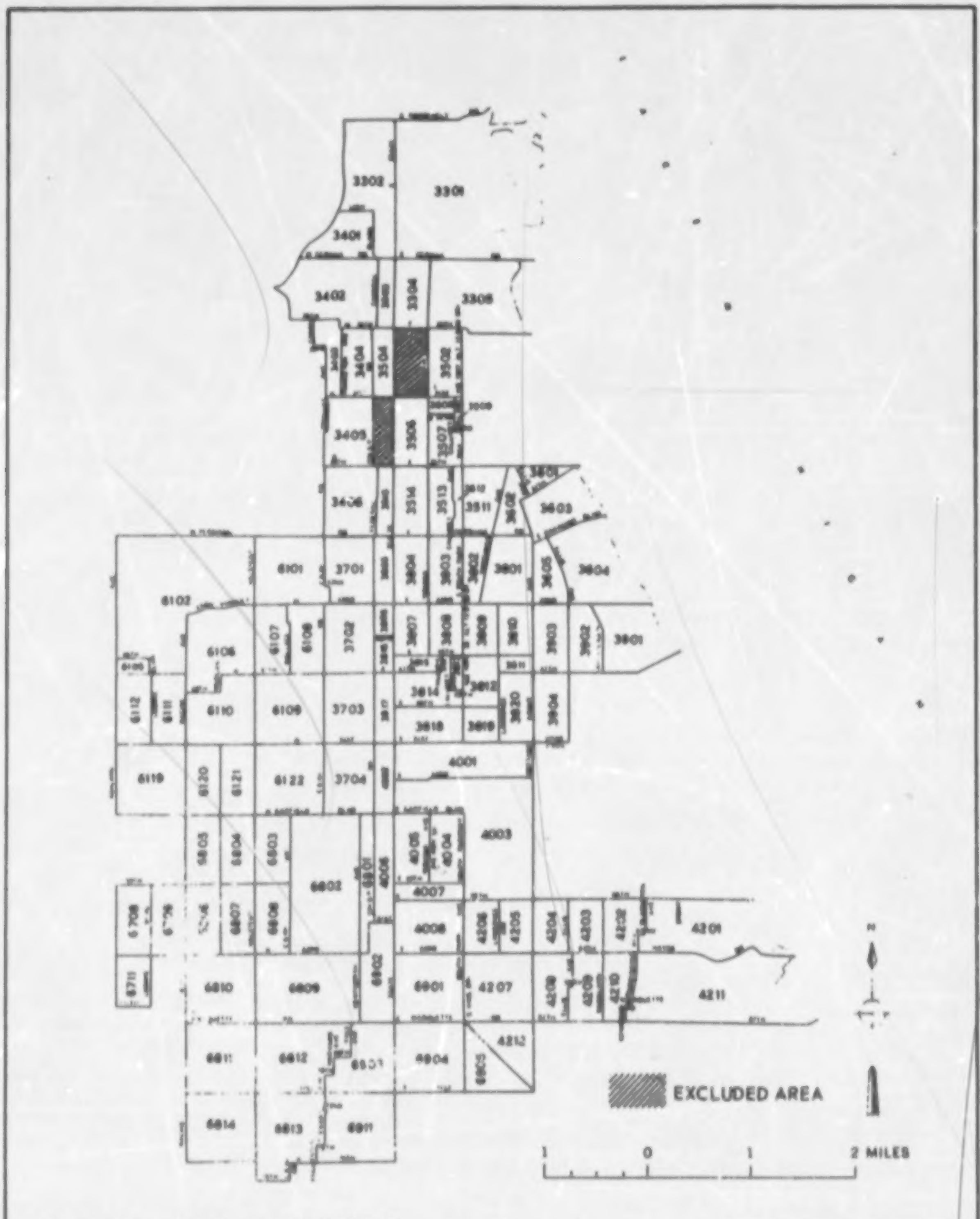
514
707
2216
708
312
317
316
315
320
321
606
607
720
719
718
2406
2403
2402
2401
2409
2410
2411
2412
2414
2416
2417
603
604
605
2428
2424
2423
2422
2421
2420
2419
2418
608
609
610
2317
2429
2430
2431
2432
2433
2434
2435
2436
616
617
2604
2603
2602
2601
2704
2703
2702
2701
2805
2804
2803
2802
2801
2606
2607
2608
2705
2714
2713
2712
2711
2710
2813
2815
2816
2817
2818
2819
2826
2825
2824
2823
2610
2715
2716
2717
2718
2719
2827
2829
2820
2908
2906
2901
2830
2831
2832
2835
2909
2911
2912
2913
2914
2915
2843
2842
2841
2840
2838
2837
2836
2910
2925
2924
2922
2917
2916
3110
3109
3108
3106
3105
3103
3102
3101
3003
3001
3113
3114
1
0
1
2 MILES
▨ EXCLUDED AREA

U. S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

BEST COPY AVAILABLE

CHICAGO, ILL. **MAP 7**

Census Employment Survey Area II


3302
3301
3401
3402
3304
3308
3404
3504
3502
3403
3506
3507
3406
3514
3513
3511
3602
3603
3601
6101
3701
3804
3803
3802
3801
3605
3604
6102
6106
6107
6108
3702
3807
3808
3809
3810
3903
3902
3901
3814
3812
3820
3904
6112
6111
6110
6109
3703
3818
3819
4001
6119
6120
6121
6122
3704
4003
6805
6804
6803
6802
4005
4004
4006
4007
6808
6807
4008
4206
4205
4204
4203
4202
4201
6810
6809
6902
6901
4207
4208
4209
4210
4211
4212
6811
6812
6903
6904
6905
6814
6813
EXCLUDED AREA
1
0
1
2 MILES

U. S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

78 BEST COPY AVAILABLE

Statistics from the CES are published in separate Census Bureau reports for each poverty area. Entitled "Employment Profiles of Selected Low-Income Areas," these reports present estimates of the total populations in the various categories covered rather than the sample figures. However, information about the sampling procedures is included in the introductions to these reports.

The CES sampling design for each poverty area in our study was a systematic sample. (For a description on how a systematic sampling design modifies the simple random sampling idea see Weiss, 1968: 237-238.) According to the U.S. Bureau of the Census (1972, PHC-16: App-7):

> The sample for the Census Employment Survey (CES) was selected from a list of addresses and special places constructed prior to the 1970 Census. A systematic sample of addresses was chosen for this survey prior to the start of the 1970 census with the restriction that households scheduled to receive a long form in the census were not eligible for selection in CES. After the census, there was an additional sampling operation to account for addresses and persons added during the census enumeration.
>
> For persons in housing units, the sampling unit was the housing unit with all of the occupants age 16 and over; for persons in group quarters, it was the person. . . . In either case, the CES interviewer was given the addresses of specific units to interview.

For the St. Louis poverty area the U.S. Bureau of the Census (1972, PHC (3)-27: X-XI) reports that a total of 3,766 addresses was assigned, and 2,754 of these were occupied at the time of interview. The remainder were either vacant or turned out to be addresses without housing units. They were able to obtain interviews from all but 3.6 percent of the occupied households. When the Bureau compared the CES data with the 1970 census statistics for this area, they discovered that the coverage for males was 10 percent below the census enumeration and for females it was 6 percent below. Coverage for black males age 25 to 44 years was less complete than for the rest of the sample; the U.S. Bureau of the Census (1972, PHC (3)-27: X) estimates that only 84 percent of those counted in the 1970 Census of Population were included in the CES.

According to the published CES report, a total of 4,979 household members 16 years of age or older were living in the interviewed households, and Work History Booklets were completed for 4,855 of these people. However, by the time we obtained the CES computer tapes from the Census Bureau, these figures had changed. Additional corrections and adjustments by the Bureau had increased the total sample size on our CES tape to 5,056 persons (consisting of 2,099 males and 2,957 females).

The CES estimate for the total population 16 years of age or older residing in the St. Louis poverty area at the time of interview is 194,882. The estimates for the black, white, and "other" color groups in the area show the following (U.S. Bureau of the Census, 1972, PHC (3)-27: XI):

Race/Origin Characteristics of CES Poverty Area: St. Louis, Mo.

Race	Number	Percent of CES Area
Total Persons	194,882	100.0
Total black	132,483	68.0
Total white	61,775	31.7
Total other	624	.3

To obtain a sample for the San Antonio poverty area the U.S. Bureau of the Census (1971, PHC (3)-50: X) assigned a total of 3,674 addresses of which 3,175 were occupied at the time of the interview. The number of refusals and "not-at-homes" was less than in the St. Louis poverty area as interviews were obtained from all but 2.6 percent of the occupied households. However, in comparison with the 1970 census, coverage of persons within households by the CES was less complete. The CES included an estimated 93 percent of the males and 98 percent of the females counted in the census. According to the published CES report, there were 6,739 household members 16 years of age or older living in the interviewed households, and Work History Booklets were completed for 6,564 of these people. However, on the CES computer tape that we received from the Census Bureau, the count for the total sample had been changed to 6,760 (2,921 males and 3,839 females).

The CES estimate for the total population 16 years of age or older living in the census tracts that make up the San Antonio poverty area is 181,318. The estimates for all racial and Spanish-origin groups in the area is shown below (U.S. Bureau of the Census, 1971, PHC (3)-50: XI):

Race/Origin Characteristics of CES Poverty Area: San Antonio, Tex.

Race or Origin	Number	Percent of CES Area
Total Persons	181,318	100.0
Total black	23,466	12.9
Total white	157,475	86.8
Spanish	132,302	73.0
U.S. born with Spanish spoken at home	58,951	32.5
Mexican origin	71,676	39.5
Cuban and other Spanish origin	1,676	.9
Other white	25,173	13.9
Total other	377	.2

81

In Chicago Area I a total of 3,894 addresses was assigned and 3,056 were occupied at the time of the survey (U.S. Bureau of the Census, 1972, PHC (3)-17: X-XI). Interviews were carried out in all but 4.3 percent of the occupied households. The CES coverage of persons within households was 9 percent below the 1970 Census of Population level for males and 7 percent below the 1970 census level for females. It is estimated that only 83 percent of the black males enumerated in the 1970 census were included in the CES. There were 5,539 household members 16 years of age or older living in the interviewed households and Work History Booklets were completed for 5,434 of these people. However, on our CES computer tape for Chicago Area I the total sample contains 5,317 persons (2,468 males and 2,849 females).

The CES estimate for the total population 16 years of age or older in the Chicago Area I poverty area is 323,422. An estimate of all racial and Spanish-origin groups in the area shows the following (U.S. Bureau of the Census, 1972, PHC (3)-17: XI):

Race/Origin Characteristics of CES Poverty Area: Chicago, Ill., Area I

Race or Origin	Number	Percent of CES Area
Total Persons	323,422	100.0
Total black	149,233	46.1
Total white	162,998	50.4
Spanish	51,616	16.0
U.S. born with Spanish spoken at home	3,264	1.0
Mexican origin	20,571	6.4
Puerto Rican origin and other Spanish origin	27,781	8.6
Other white	111,382	34.4
Total other	11,191	3.5

A total of 3,760 addresses was assigned in Chicago Area II and 3,058 were occupied at the time of interview (U.S. Bureau of the Census, 1972, PHC (3)-18: X). Coverage was a little better than in Chicago Area I as interviews were obtained from all but 3.6 percent of the occupied households. However, relative to the 1970 Census of Population coverage of persons in households, the CES enumeration in Chicago II was less successful than the Chicago I CES count. The CES missed an estimated 14 percent of the males and 9 percent of the females enumerated in the population census. The number of household members 16 years of age or older living in the interviewed households was 5,971, and Work History Booklets were completed for 5,604 of these people. On our CES computer tape for Chicago II, however, the number in the total sample had been changed to 5,452 persons (2,294 males and 3,158 females).

For the Chicago Area II poverty area the CES estimate of the total population 16 years of age or older is 265,753. Separate estimates by racial and Spanish-origin groups for the area are as follows (U.S. Bureau of the Census, 1972, PHC (3)-18: XI):

Race/Origin Characteristics of CES Poverty Area: Chicago, Ill., Area II

Race or Origin	Number	Percent of CES Area
Total Persons	265,753	100.0
Total black	230,627	86.8
Total White	30,802	11.6
Spanish	3,010	1.1
U.S. born with Spanish spoken at home	342	.1
Mexican origin	1,685	.6
Cuban and other Spanish origin	983	.4
Other white	27,792	10.5
Total other	4,324	1.6

Dependent Variables

This study is a search for knowledge that will help to combat the employment problems of the poor. Thus, our dependent variables measure not only the individual worker's income, but also his employment, unemployment, and labor force particiation levels.

The dependent variable "income" measures the respondent's total annual income from all sources. The figure is the sum total of the respondent's answers in the CES to questions about money received during the past 12 months from: wages or salary (tips, commissions); net income from own business (farm); workmen's compensation; unemployment compensation; social security; other pensions such as Veterans, private employer, Government, etc.; welfare or public assistance (e.g., aid to dependent children, old age assistance, aid to the disabled, foster child care); rents, including that from roomers and boarders; interest or dividends; and any sources other than those already mentioned.

The exact income figures were provided by the CES tapes. The only adjustment we made with these data pertained to the cases with higher incomes. With the statistical procedures we have used, the few extreme cases in our sample would have distorted our findings. Therefore, after evaluating the income frequency distributions for each study area, we decided that any case with over $11,000 total income would be recorded in the MCA and AID analyses as having only $11,000. Our limits of time and resources did not allow us to study separately the various components that make up the total income figure. We recognize, however, that the forces that affect income levels differ for different sources of income. Thus, we view our analysis of total income levels as a general approach that should be supplemented with similar studies controlling on type of income.

The"employment" dependent variable is defined as the estimated number of hours that the worker was employed during the 12 months preceding the date his household was covered in the CES. The "unemployment" variable is defined as the estimated number of hours that the worker was looking for work or on layoff from a job. The "labor force participation" variable is defined as the estimated number of hours that the worker spent both employed and unemployed during the 12 months preceding the date of interview.

The employment variable is constructed from the information supplied by the following questions in the CES: (1) In the past 12 months how many weeks did you work either full-time or part-time (not counting work around the house)? (2) When you were working in the past 12 months, did you usually work full-time or part-time?

The number of full-time and part-time workers in each sample (including those in school or the Armed Forces when not working or looking for work) during the past 12 months is as follows:

	Full-Time	Part-Time	Total
St. Louis			
Number	1,332	142	1,474
Percent	90.4	9.6	100.0
San Antonio			
Number	1,994	265	2,259
Percent	88.3	11.7	100.0
Chicago I			
Number	1,672	122	1,794
Percent	93.2	6.8	100.0
Chicago II			
Number	1,452	111	1,563
Percent	92.9	7.1	100.0

The unemployment dependent variable is constructed from a question that follows questions 1 and 2 above: How many of the remaining weeks (52 minus the answer to question 1) were you looking for work or on layoff from a job? Our study of the unemployment variable examines the socioeconomic factors that led to more versus less unemployment. In order to have a workable research design, we have included in the samples for the unemployment analyses only those workers who experienced some unemployment during the previous 12 months.

The number of part-time and full-time male workers in our sample of those with some unemployment during the previous year is shown below:

	Part-Time Workers		Full-Time Workers		Total Unemployment
	Number	Percent	Number	Percent	Number (=100)
San Antonio					
All unemployed	91	21.8	326	78.2	417
Unemployed and not in school or Armed Forces during past 12 months	45	15.4	248	84.6	293
St. Louis					
All unemployed	38	13.1	252	86.9	290
Unemployed and not in school or Armed Forces during past 12 months	21	9.1	212	90.9	233
Chicago I					
All unemployed	34	10.5	289	89.5	323
Unemployed and not in school or Armed Forces during past 12 months	22	8.1	250	91.9	272
Chicago II					
All unemployed	36	15.0	204	85.0	240
Unemployed and not in school or Armed Forces during past 12 months	14	7.3	178	92.7	192

The labor force participation (LFP) dependent variable is constructed from the total number of weeks each worker was employed and unemployed during the prior 12 months.

The "employment" and "LFP" dependent variables are measures of the decision and ability of each worker to spend more versus less time in the labor force (employed or seeking employment), given the prior decision to participate in the labor force and the ability to complete at least one week of employment during the previous year. We realize that what causes the decision and ability to participate in the labor force at all is another important question, particularly in regard to inner-city residents. Searching for the answer to this question, however, would have required a separate study.

The number of weeks of employment, unemployment, and LFP experienced by each worker was multiplied by an estimate of the number of hours per week that the individual participated. In the CES the following categories were used to code the number of weeks each respondent worked in the past 12 months:

(1) None
(2) 1-13 weeks
(3) 14-26 weeks
(4) 27-39 weeks
(5) 40-47 weeks
(6) 48-49 weeks
(7) 50-52 weeks

With no further information available on the distribution of workers by weeks worked within these categories, we simply took the median number of weeks within each grouping as the average number of weeks worked. Thus, our averages (rounded to whole weeks) for the above categories became:

(1) None
(2) 7 weeks
(3) 20 weeks
(4) 33 weeks
(5) 43 weeks
(6) 48 weeks
(7) 51 weeks

To convert the number of weeks employed to the average number of hours each part-time or full-time worker was employed, we multiplied average weeks worked per worker by our estimate of the average number of hours worked per week. While the CES data do not provide figures on hours worked per year, they do include answers to the question "How many hours did . . . work last week at all jobs?" Since the results from this question for males 16 to 64 years old who worked at least one week during the past year in each low-income area showed that a large majority of the full-time male workers who were employed at all that week worked 40 hours, we used this figure as our estimate.

The part-time male workers employed that week exhibited a wide range of hours worked so we used the mean figures (rounded to the nearest hour) for our estimates. The figures for each area are as follows:

	Part-Time Workers	
Study Area	Before rounding	Rounded
St. Louis	(25.6)	26
San Antonio	(27.6)	28
Chicago I	(24.4)	24
Chicago II	(27.6)	28

Thus, for each worker the appropriate "average hours worked in the last week" figure was multiplied by the number of weeks he worked in the past 12 months to obtain his "number of hours of work per year" figure.

A similar procedure was used to estimate the number of hours of unemployment in the last 12 months per worker. In the CES the following categories were used to code the number of weeks each respondent was looking for work or on layoff from a job:

(1) None
(2) 1-4 weeks
(3) 5-10 weeks
(4) 11-14 weeks
(5) 15-26 weeks
(6) 27-39 weeks
(7) 40-49 weeks

(Respondents who worked 50-52 weeks in the past year were not asked this question.)

We took the median number of weeks within each category as the average number of weeks unemployed (rounded to whole weeks). Therefore, our averages for the above categories became:

(1) None
(2) 2 weeks
(3) 7 weeks
(4) 12 weeks
(5) 20 weeks
(6) 33 weeks
(7) 45 weeks

To estimate the hours unemployed in the past year, we assumed that a worker was unemployed per week according to the average number of hours he usually worked when employed. Therefore, we used the same "average hours employed in past week" figures as were used for the "employed" dependent variable and multiplied by the appropriate figure (part-time or full-time) for each worker times the number of weeks he was unemployed. With this procedure the part-time worker is assigned a lower-rate (fewer hours) of unemployment than is the full-time worker for each week that he has looked for work or been laid-off. The assumption behind this procedure is that full-time workers experience a greater loss of work time from unemployment than do part-time workers. We do not really know, however, whether or not the part-time worker would actually prefer full-time employment, but simply cannot get it.

Nevertheless, using lower unemployment rates for part-time workers than for full-time workers seems appropriate when these figures are combined with the employment figures in order to calculate the LFP rates. This way, the full-time worker's participation in the labor force is given more weight than is the part-time worker's participation, in terms of unemployment as well as employment.

The measurement of part-time and full-time worker's unemployment when analyzing unemployment alone rather than as part of LFP is a different situation. As a form of participation in the labor force, unemployment is contrasted with nonparticipation in the labor force. In our analysis of unemployment as a separate variable, however, unemployment is considered in relation to employment. In other words, from this perspective unemployment is a negative condition because it represents nonparticipation in employment. From this viewpoint, the part-time worker probably should not be considered less unemployed than the full-time worker when both have been seeking work for the same number of weeks.

For the unemployment study we have dichotomized the unemployment figures into "workers unemployment 400 hours or less" and "more than 400 hours." This procedure has the indirect effect of dividing most workers, whether part-time or full-time, according to weeks unemployed. There are, however, a few part-time workers in the "400 hours or less" category who would be in the "more than 400 hours" category if they were full-time workers (seven in San Antonio, three in St. Louis, two in Chicago I, and two in Chicago II). In other words, these part-time workers were unemployed as many weeks as some full-time workers who are in the "more than 400 hours" category.

Independent Variables

The independent variables derived from the CES data for this study form two basic groups. One group includes variables that focus directly on labor force characteristics, while the other group is composed of variables that measure more personal factors. The personal variables can be further divided into those that are primarily current statuses or situations versus those more antecedent or long-term in character. Specifically, the independent variables are:

Personal Variables

Antecedent:

Race
Ethnicity (Spanish & non-Spanish origin)
Where lived at age 16
Education
Job Training
Veteran Status

Current:

Age
Marital Status
Relation to Head of Household
Family Size
Household Size
Years Lived at Present Address

Labor Force Variables

Job-Seeking Method (to obtain current or most recent job if looked in the previous 12 months)
Health Problem (prevents either holding a job, finding a better job, looking for a job, or wanting a job)
Age Problem (because employers think worker is too young or too old, the worker is either not holding a job, not finding a better job, not looking, or not wanting a job)
Lack of Skill, Experience, or Education (prevents either holding a job, finding a better job, looking for a job, or wanting a job)
Occupation (current job or, if unemployed, last job held)
Industry (in which currently employed or, if unemployed, where last worked)
Class of Worker (private, government, self-employed for current or last job)

It is obvious already that we have included a mixture of nominal (e.g., race) and interval (e.g., age) predictors. And some of the predictors (e.g., occupation) could be considered ordinal variables.

More detailed descriptions of the independent variables are presented below:

Personal Variables - Antecedent

Race. The sample is divided into three groups on the basis of race: white, Negro, and "other races." The last category includes any other race except white and Negro. Household members were classified into racial groups from the CES enumerator's observation. In this report the now popular term "black" is used sometimes instead of Negro.

Ethnicity. This variable divides the sample into the categories "Spanish origin" and "non-Spanish origin." We have defined the respondent as Spanish origin if he was born in Mexico or Puerto Rico, or either of his parents was born in Mexico or Puerto Rico, or if Spanish was often spoken by his parents in his home when he was a child. Non-Spanish origin is the residual category.

Where Lived at Age 16. Some indications of residential origin and migration patterns are provided by this variable. In addition to "this city" there are six other categories of residential location at age 16:

(1) In this city
(2) In a suburb near a large city
(3) In a large city (over 250,000 population)
(4) In a medium size city (50,000-250,000 population)
(5) In a small city or town (under 50,000 population)
(6) In open country, but not on a farm
(7) On a farm

Years of School Completed (Education). The Census Bureau derived this variable from the combination of answers to questions concerning the highest grade of school attended by the worker and whether or not that grade was finished. According to the Bureau:

> The questions on educational attainment apply only to progress in "regular" schools. Such schools include graded public, private, and parochial elementary and high schools (both junior and senior high), colleges, universities, and professional schools, whether day schools or night schools. Thus, regular schooling is that which may advance a person toward an elementary school certificate or a high school diploma, or a college, university, or professional degree. Schooling in other than regular schools was counted only if the credits obtained were regarded as transferable to a school in the regular school system (U.S. Bureau of the Census, 1972, PHC (3)-27; Appendix A: App 2-3).

We divided the workers in our sample into five educational categories:

(1) 7 years of school or less

(2) 8 years of school

(3) 9 to 11 years of school

(4) 12 years of school

(5) More than 12 years of school

Job Training. This variable measures responses to questions asking whether or not the worker completed at least one of the following types of job-training programs:

(1) Job-training program in high school, trade school, or junior college (examples: vocational, business, or technical)

(2) Job-training course in the Armed Forces (excluding basic training)

(3) An apprenticeship program

(4) Any other training program (examples: Upward Bound, Job Corps, or Neighborhood Youth Corps)

If the worker had completed one or more of these programs he was classified as a "yes," if he had completed none he was classified as a "no." In other words, we have not classified workers any further on the basis of specific types of job training or number of programs completed. However, each of the four categories in this variable deserves separate study in future analyses of the CES data.

Veteran Status. The designation veteran is limited to workers who have been on active duty in the U.S. Armed Forces. This includes men who have been on active duty status for several months in the reserve branch of any of the service organizations.

Personal Variables - Current

Age. This is the age of the person at the time that the household was enumerated. The respondents age 16 to 64 years old are divided into seven categories:

(1) 16 to 19 years
(2) 20 to 24 years
(3) 25 to 34 years
(4) 35 to 44 years
(5) 45 to 54 years
(6) 55 to 59 years
(7) 60 to 64 years

Marital Status. This classification refers to the worker's marital status at the time of enumeration according to one of four categories. The categories are defined as follows: (1) "married - spouse present" refers to a worker whose wife lives in the same household; (2) "married - spouse absent" refers to a worker whose spouse is not presently a member of the household; (3) "divorced or widowed" refers to a worker whose spouse is not a household member because of divorce or death; and (4) "never married" refers to a worker who has never married or whose only marriage has been annulled.

Relationship to Head of Household (Relation to Head). A household consists of all of the people who occupy a housing unit. A house, an apartment, a group of rooms, or a single room is defined by the Census Bureau as a housing unit:

> "when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live and eat with any other persons in the structure and there is either (1) direct access from the outside or through a common hall; or (2) a kitchen or complete working facilities for the exclusive use of the occupants.
>
> A household includes the related family members and all the unrelated persons, if any, such as lodgers, foster children, wards, or employers who share the housing unit. A person living alone in a housing unit or a group of unrelated persons sharing a housing unit as partners is also counted as a household" (U.S. Bureau of the Census, 1972, PHC (3)-27, Appendix A: App 1).

In this study, the five categories defining relationship to head of household are:

1. Head with other relations in household
2. Head with no relations in household
3. Non-relative of head with own relations in household
4. Non-relative of head with no relations in household
5. Other relative of head

Number of Family Members (Family Size). According to the CES definition, the term "family" refers to:

> "A group of two or more persons related by blood, marriage, or adoption and residing together; all such persons are considered as members of the same family. Thus, if the son of the head of the household and the son's wife are in the household, they are treated as part of the head's family. On the other hand, a lodger and his wife not related to the head of the household or an unrelated servant and his wife are considered a separate family, and not a part of the household head's family" (U.S. Bureau of the Census, 1972, PHC (3)-27, Appendix A: App-1).

Persons 16 years old and over (other than inmates of institutions) who are not living with any relatives are referred to as "unrelated individuals" in the published reports of the CES. In our report, however, the worker who is an unrelated individual is coded as having one family member. In larger family sizes the respondent continues to be included in the total count of family members. Thus a worker living with one other family member is defined as having a family size of two, and so on. Family sizes from one through six members are coded separately. Workers in families of seven or more are grouped together in the highest category.

Number of Persons in Household (Household Size). A more inclusive definition than "family size," "household size" measures the total number of persons occupying the worker's housing unit. The CES tapes provide only three categories for this variable: "one," "two," and "three or more persons in household."

Years Lived at Present Address (Years at Present Address). As another measure of migration patterns, this variable refers to the latest period of continuous residence and includes those persons who have never moved. Vacations and other temporary visits are not considered a break in continuity according to the CES definition. We divided this variable into five categories: (1) one year of less; (2) 2 to 5 years; (3) 6 to 10 years; (4) 11 to 20 years; (5) 21 or more years.

Labor Force Variables

Job-Seeking Method. This variable indicates which way of looking for work got the worker his present or most recent job. However, it does not reveal the job-seeking method used to get the worker's present or last job if he had not sought work within the past 12 months. Nor does it indicate the method used by the worker who had been looking for a new job during the previous year, but had not found one. The categories of response provided on the CES tape are:

1) Checked with State Employment Service
2) Applied directly to employer
3) Asked friends or relatives
4) Checked newspapers
5) Registered with union
6) Checked with a private employment agency (one supported by fees)
7) Checked with organizations such as community action groups, Urban League, and welfare agencies
8) All other methods
9) Did not look

The method "go to special streets or places where employers come to pick up workers" was asked in the CES, but according to the information on our tapes, no one in our sample had this answer. Data for the specific job-seeking method variable that we used in our study are not shown in the Census Bureau's published reports. However, figures for the "special streets or places" category are shown in the published volumes in response to the question on the "principal job-seeking method used in the last 12 months." Because the "go to special streets" category was coded "zero" we wondered if workers in that category had been mixed in with the "no answer" respondents who show up as "blank" on the tape. However, the Census Bureau staff member we talked with said that if there are no zero answers on our CES tapes we should assume that no one was in the "special streets or places" category.

We constructed three variables from CES questions that asked workers what they thought were employment barriers for them. In order to obtain information about each barrier for a sizeable portion of the sample, we combined responses from questions that differed because they related to the varied employment situations currently experienced by the workers. This procedure resulted in the following variables:

Health is a problem either in holding a job, finding a better job, not looking, or not wanting a job (Health Problem). The respondent's answer was coded either "yes" or "no."

The worker is either not holding a job, not finding a better job, not looking, or not wanting a job because employers think he is too young or too old (Age Problem). Again, the worker's response to this question was coded either "yes" or "no." This question was not asked of workers within the 25 to 49 years age group.

The worker is either not holding a job, not finding a better job, not looking, or not wanting a job because he lacks skill, experience or education (Lack of Skill, Experience, or Education). These answers were coded "yes" or "no."

The questions these variables are constructed from do not determine if this barrier is the only reason, the main reason, or a secondary reason for the worker's employment problem. If applicable, respondents could answer "yes" to more than one of these barriers.

Occupation, Current or Last Job. The categories for occupation are based on the classification system used in the 1970 decennial census. Reference to current job is the job the worker held during the past week. If two jobs were held then the job reported was the one at which the person worked the greater number of hours. For a person who was unemployed at the time of the survey, the last job that he held was reported. The occupational categories used in this study are:

1) Professional, technical, and kindred workers
2) Managers and administrators (except farm)
3) Sales workers
4) Clerical and kindred workers
5) Craftsmen, foremen and kindred workers
6) Operatives (except transport)
7) Transport equipment operatives
8) Laborers (except farm)
9) Service workers (except private household)
10) Private household workers
11) All farm workers
12) Workers not classifiable (i.e. occupation not reported)

The above categories were used in the MCA computer analysis. Because of the small number of cases in category 10 (private household workers), it was combined with category 9 (service workers) in the AID computer analysis to avoid misinterpretation of the results. For the THAID computer analysis, the number of occupational categories had to be lowered from twelve to ten in order to meet the program's restrictions. (The MCA, AID, and THAID computer programs are discussed in detail in the last section of this chapter.) Consequently, we combined category 6 (operatives, except transport) and category 7 (transport equipment operatives) into one category. Also categories

9 (service workers), and category 10 (private household workers) were combined into one category. The MCA computer analysis of unemployment also used the smaller set of occupational categories.

Industry, Current or Last Job. The categories for industry are based on the classification system used in the 1970 decennial census. The definitions of current job and last job are the same as those applied to the "occupation" variable. The industry categories used in the study are:

1) Agriculture, forestry, and fisheries
2) Mining
3) Construction
4) Manufacturing-durable goods
5) Manufacturing-nondurable goods
6) Transportation, communication, and other public utilities
7) Wholesale and retail trade
8) Finance, insurance, and real estate
9) Business and repair services
10) Personal services
11) Entertainment and recreation services
12) Professional and related services
13) Public administration
14) Workers not classifiable (i.e. industry not reported)

As with the "occupation" variable, the above categories were used in the MCA computer analyses, but not in the AID computer analyses. In the AID runs category 2 (mining) was combined with category 1 (agriculture, etc.) because of the small numbers in the mining industry. Because the THAID computer program, which is used in the analysis of unemployment patterns, is limited to ten categories per variable, eight of the industry categories were combined as follows:

1) Categories 1 (agriculture, forestry, and fisheries) and
2 (mining) were combined
2) Categories 4 (manufacturing-durable goods) and
5 (manufacturing-nondurable goods) were combined
3) Categories 8 (finance, insurance, and real estate) and
12 (professional and related services) were combined
4) Categories 10 (personal services) and
11 (entertainment and recreation services) were combined

The smaller set of industry categories also was used in the MCA study of unemployment.

Class of Worker, Current or Last Job. This variable divides the workers into the following categories:

1) Employee of a private company, business, or individual for wages, salary, or commission
2) Government employee (Federal, State, or County)
3) Self-employed in own business, professional practice, or farm
4) Working without pay in family business or farm

The definitions of current and last job are the same as those used for the "occupation" and "industry" variables.

Analytical Techniques

Most statistical studies of poverty problems have concentrated on only two- or three-variable relationships at a time, even when a large number of variables have been included in the total study. Because there are so many possible personal and situational determinants of poverty, often varying simultaneously and in subtly interconnected ways, social scientists generally have made theoretical and statistical controls on a number of them in order to make the research process more manageable. The information from these studies adds up to a series of two- or three-variable statements such as "the higher the education the higher the income"; or "blacks earn less than whites"; or "there is a positive relationship between education and income for whites, but for blacks there is no relationship, except for those with a college education."

While this approach has provided many important advances in our knowledge about poverty, it has not told us much about the extent to which these socioeconomic variables are related into an organic whole. How do all of the objective situational and personal conditions together become organized within the roles of the individual workers so that some workers stay in a low-income position while others move out of poverty?

The last decade has seen the development of new multivariate statistical models that are more suitable for analyzing complex social processes. One approach that is now making valuable contributions to the sociological literature on status attainment and labor force participation is the "path analysis" technique (Duncan, 1966). This procedure is a pattern of interpretation that makes explicit the rationale of conventional regression analysis as applied recursively to generate a system of equations. Through pictorial representation and integration of all causal relationships in the model one proposes, the total logic of the analysis is made quite clear, and it is free from any hidden assumptions.

With the path analytic technique one can incorporate antecedent and intervening variables into causal models and consider the impact of indirect as well as direct effects in the variable relationships. However, this approach assumes that the data are additive--that the average score on a dependent variable for a set of individuals is predictable by adding together the effects of several predictors. The effect of each predictor on the dependent variable is seen as pervasive and independent of the levels of any other predictor.

In the real world, however, social characteristics and conditions often do not have an additive impact on a worker's income. Any single characteristic of a worker can potentially mean any number of things, depending on how it interacts with other factors. For example, how much a worker earns may depend, in part, upon his educational level. But the relative influence of a particular level of education may depend, in turn, on a variety of other factors such as the worker's age, race, and the type of industry in which he works.

Another complication is that some variables may be substitutes for one another as influences on workers' incomes. Thus, one worker may obtain a high income level because he achieved a college degree, while another worker without a college education may still reach a high income level because he received on-the-job training.

For these kinds of social patterns the assumptions of an interaction model are more appropriate than those of an additive model. An interaction model assumes that along with the direct, independent effects of the predictors there are additional effects following from certain combinations of predictors. Consequently, the main effects of a predictor may not be the same or even present in all parts of the sample. Moreover, the interaction effects may be quite complex and exhibit different patterns among various subgroups in the sample.

In this study we first analyzed our data within an additive frame of reference. We then reanalyzed the data using an interaction model. On the basis of new information generated by the interaction analysis, some revisions were made in the generalizations that had been derived from the additive analysis.

The Multiple Classification Analysis (MCA) computer program (Andrews, Morgan, and Sonquist, 1967) was used to determine the relative importance of our independent variables within the context of an additive model. MCA can be considered the equivalent of a multiple regression program using dummy variables. Unlike simple forms of other multivariate techniques, this method can handle predictors with no better than nominal measurement and interrelationships of any form (linear, curvilinear, etc.) between a predictor and the dependent variable. However, the dependent variable used in the MCA program should form an interval scale. Andrews, Morgan, and Sonquist (1967:17) write that:

> To use the program for analyzing a dependent variable having ordinal properties, one would have to be willing to assume it approximated an underlying scale. The program may also be used on a 2-point nominal scale (e.g., 0=no, 1=yes). In effect, one is using a "proportion" scale in the sense that a mean of .65 for a group would indicate "65 percent yes" and the output statistics are equivalent to a two-group discriminant function analysis.

Our income, employment, and labor force participation dependent variables form interval scales. However, our unemployment dependent variable was set up in binary form ("workers unemployed 400 hours or less" versus "workers unemployed more than 400 hours") so the two-point scale MCA procedure was used for analyzing this measure.

The MCA statistics show how each predictor relates to the dependent variable, both before and after adjusting for the effects of the other predictors in our study. In addition, the MCA program computes a multiple correlation coefficient, which indicates the magnitude of the relationship between the dependent variable and all predictors considered together.

Two computer programs were used to search for interaction patterns. For our analysis of the income, employment, and labor force participation variables we used the Automatic Interaction Detector (AID) program (Sonquist, Baker, and Morgan, 1971; also see Sonquist, 1970; Sonquist and Morgan, 1964). To analyze our unemployment dependent variable we used the THAID computer program (Morgan and Messenger, 1973).

The AID and THAID programs, like the MCA program, have the advantage of being able to handle the mixture of nominal, ordinal, and interval variables that we have included in our analysis, and they do not require the restrictive assumption of linearity in the data. Along with these advantages, the AID and THAID programs, unlike the MCA program, also do not require that the data meet the additivity assumption.

The AID statistical procedure can be broadly described as a repeated one-way analysis of variance components. The basic purpose of the technique is to subdivide the sample, through a series of binary splits, into a mutually exclusive set of subgroups that maximize one's ability to predict the values of the dependent variable. As Sonquist, Baker, and Morgan (1971:2) write:

> The general principle of the program is an application of a prestated, if complex, strategy simulating the procedures of a good researcher in searching for the predictors that increase his power to account for the variance of the dependent variable. Thus, the basic principle of least squares is followed and the focus is on power in reducing error, i.e., on importance rather than on significance. In place of restrictive assumptions, reliance is on a prearranged procedure which starts with the most stable and dependable finding (division of the data set on that predictor which reduces the variance of the dependent most) and works down to less and less dependable and powerful findings on smaller and smaller subgroups.

The process of analysis can be described in the form of a series of decision rules and instructions. Initially the sample under study is viewed as a single group. Considering all feasible divisions of the group on the basis of each independent variable included (but not combinations of variables), the computer must first decide what single division of the parent group into two subgroups will reduce the predictive error a maximum amount. Once this answer is generated by the computer, it has to make a second decision: which of the two groups it now has has the largest remaining predictive error (error sum of square), and therefore should be investigated next for possible further subdivision. This process continues on until one or more of three basic criteria are met. The three criteria and the specific standards used in our study are:

1) The marginal (added) reduction in error if a split occurs is less than 0.6 percent of the original variance around the mean.
2) A tentative split includes a group that would have fewer than 25 cases.
3) The total number of splits has already reached 30. This means that there are already that many final groups plus one, and twice that many groups altogether (60) that have been generated by the splitting process.

Thus, with the AID procedure one is able to discover not only those determinants of importance to the sample as a whole, but also those variables that have an impact on only certain subgroups within the larger sample.

Because our samples of workers who experienced some unemployment during the previous year are relatively small, we decided to use the THAID computer program (Morgan and Messenger, 1973) instead of AID to analyze the unemployment dependent variable. A sample size of at least 1000 cases is preferable for either an AID or THAID analysis, but THAID appears to be more appropriate when smaller samples are used with a binary dependent variable. When comparing the applicability of THAID versus AID (and other programs) for analyzing dichotomous dependent variables, Morgan and Messenger (1973:5) argue that "THAID is more robust in giving results less sensitive to sampling effects in all instances and particularly when the dichotomy is extremely unimodal, i.e., distributed 2/3, 1/3, or more unevenly." (For our unemployment dependent variable the most uneven dichotomy among our samples is a split of 62.5 percent versus 37.5 percent.)

The THAID program was developed with the idea of generalizing the AID procedure to nominal dependent variables. Even though THAID is designed for nominally scaled dependent variables, it can also be used with a dichotomized ordinal variable such as our unemployment measure. THAID, like AID, calculates sequential binary splits on the given categorical predictors. Predictors are selected that when split into two groups will maximize the difference in the distribution of the dependent variable between those two groups.

The version of the THAID program that we have run uses the Delta criterion to replace the explained sum of squares criterion used in AID. Thus, the extent to which our predictors are able to divide the poverty-area workers into the high and low unemployment categories is given by the Delta statistic (See Morgan and Messenger, 1973:15-22). Delta is analogous to the Chi-Square statistic, but it is not squared and it is constrained to vary between zero and unity. Predictors with large Deltas are best able to differentiate the sample on the distribution of the dependent variable categories.

Chapter 4

INCOME

To be "poor" is to have little or no income. While this is not the only definition of poverty, it is the most basic, common standard that we use in our society for judging whether or not a person is poor. Therefore, we chose to begin our presentation of the findings from this study with an examination of the variations in poverty-area workers' income levels.

In the first stage of our study we used the Multiple Classification Analysis (MCA) computer program to measure the pattern and strength of the relationship between each socioeconomic predictor and income level, both before and after controlling statistically for the effects of the other predictors. This procedure is similar to traditional regression analysis and it assumes that the data are additive.

For this analysis we formulated a set of hypotheses specifying the expected pattern of relationship of each independent variable to the poverty-area workers' annual income levels. The ideas for the hypotheses tested in the MCA analysis came primarily from findings in previous studies. For some of our predictors, such as age, the existing evidence about the pattern of relationship with income was fairly clear and consistent, and there was no reason to hypothesize any different pattern. For other predictors, however, such as where lived at age 16, it was not very easy to hypothesize a relationship on the basis of earlier studies. This was because the results either were contradictory or they were not closely related to our study's concepts and context. In each of these cases we simply made a discretionary choice about which pattern of relationship to hypothesize. The complete set of hypotheses for the 19 predictors is presented in Table 1.

In the second stage of our study of variations in workers' incomes we reanalyzed the same data using the Automatic Interaction Detector (AID) computer program to search for patterns of relationship not revealed by the MCA program. This analysis was essentially an exploratory procedure; we did not attempt to predict beforehand what patterns of interaction would appear. We will discuss this stage of the study after presenting the MCA findings.

Table 2 illustrates the detailed results produced by the MCA. The grand mean of $5,438 shown in the table heading is the average income figure for all workers 16 to 64 years old (who were not in school or the Armed Forces when not working during the preceding 12 months) in the St. Louis poverty area sample. (We made $11,000 the highest income code in order to truncate the few extreme cases at the upper end of the distribution). The table may be further explained by referring to the data on the relationship between race and annual income level. The first column shows the unadjusted deviations (in dollars) from the grand mean for the three racial categories. Whites' incomes average $493 above the grand mean, while blacks' incomes average $245 below the mean. Since the grand mean is $5,438, these deviations indicate that the mean income for white workers is $5,931 and for black workers $5,193. The last column shows that only five cases fall in the "other" racial category, so the deviation of $758 above the grand for this group may not be a valid statistic.

The unadjusted scores make no allowance for the intercorrelations between the predictors. For example, the below-average income level of the black workers might partly result from blacks being overrepresented in the lower educational groups. The second column presents the adjusted deviations from the grand mean for each variable after statistically holding constant the influence of the 18 other variables in the analysis. That is to say, an

Table 1. Hypothesized Relationships of Socioeconomic Variables with Annual Income

Independent Variables	Hypothesized Relationships with Income Level
Personal Variables--Antecedent	
Race	Higher incomes for white workers than for black workers
Ethnicity	Higher incomes for non-Spanish-origin workers than for Spanish-origin workers
Where Lived at Age 16	Higher incomes for workers from a farm, the country, or a small city; lower incomes for workers from a medium city, large city, suburb, or this city
Education	Income level has a positive correlation with number of years of schooling completed
Job Training	Higher incomes for workers with job training than for those without job training
Veteran Status	Higher incomes for veterans than for non-veterans
Personal Variables--Current	
Age	Highest income for prime-age workers (25 to 54 years); next highest for older workers (55 to 64 years); lowest incomes for younger workers (16 to 24 years)
Marital Status	Highest incomes for married workers with wife present; next highest for married workers with spouse absent, and for workers who are divorced or widowed; lowest incomes for workers who have never married.
Relation to Head of Household	Highest incomes for household heads, with other relations in household; next highest for heads, without relations in household; next highest for non-relative of head, without relations in household; lowest incomes for workers classified "other relative of head." (Sample sizes of non-relatives of head with own relations in household are too small for reliable estimates.)

(continued)

Table 1. (Continued)

Independent Variables	Hypothesized Relationships with Income Level
Family Size	Higher incomes for workers in families of moderate size (2 to 6 persons); lower incomes for unrelated workers (i.e., not living with any relatives) and workers in large families (7 persons or more).
Household Size	Highest incomes for workers in households with two persons; next highest for workers in households with three persons or more; lowest incomes for workers who live alone
Years at Present Address	Income level has a positive correlation with number of years lived at present address
Labor Force Variables	
Job-Seeking Method	Higher incomes for workers who did not look for work in past 12 months, or if did look who asked friends or relatives, registered with union, checked with private employment agency; lower incomes for workers who applied directly to employer, checked with State Employment Service, checked with community organizations, or checked newspapers
Health Problem	Higher incomes for workers answering "no"
Age Problem	Higher incomes for workers answering "no"
Lack Skill, Experience or Education	Higher incomes for workers answering "no"
Occupation	Highest incomes for professionals and managers; next highest for craftsmen and foremen, sales workers, and clerical workers; next highest for operatives; lowest incomes for service workers, non-farm laborers, and all farm workers (Sample sizes of private household workers are too small for reliable estimates. Sample sizes of all farm workers also are too small for reliable estimates of income with the possible exception of San Antonio's sample.)

(continued)

Table 1. (Continued)

Independent Variables	Hypothesized Relationships with Income Level
Industry	Higher incomes for workers in public administration; construction; transportation, communication, and utilities; manufacturing durables; manufacturing non-durables. Lower incomes for workers in finance, insurance, and real estate; wholesale and retail trade; business and repair services; personal services; professional services; entertainment and recreation; agriculture, forestry and fisheries (With the possible exception of San Antonio's sample, the sample sizes for the last two industrial categories listed--agriculture, etc., entertainment, etc. --are too small to provide reliable income estimates. The sample sizes for workers in mining are too small in all four areas.)
Class of Worker	Highest incomes for government employees, next highest for employees of private companies or individuals; lowest incomes for self-employed workers. (The category "without pay in family business" has too few cases in each of our samples to provide a reliable estimate.)

adjusted deviation is an estimate of what the mean would be if the group of workers in the category were distributed over all categories of the other predictors exactly as the total group of workers is distributed. (See Andrews, et al., 1967:31-38, 100-106 for further explanation of the MCA adjustment procedure.) The adjusted or net deviations from the mean, attributable to race alone, now become plus $419 for white workers, minus $202 for black workers, and minus $439 for workers of other races.

The effects shown by the adjusted deviations are assumed to be additive. For example, the mean income for blacks with seven years or less of schooling would be $4,705 ($5,438 minus $202 minus $531); the mean for white workers with 12 years of schooling would be $6,134 ($5,438 plus $419 plus $277). For some of the variables shown in the detailed MCA tables throughout this study, the number of cases does not sum to the total sample size because we have not presented the few cases that fall into the "no answer" or "other" categories. However, these cases are included in the MCA computer analyses.

In the next section we present the MCA results and indicate how well the patterns of relationship in the poverty areas fit the patterns that we hypothesized.

MCA Findings

Race. The detailed MCA results for the antecedent personal variables (race, ethnicity, where lived at age 16, education, job training, and veteran status) are shown in a separate table for each poverty area (Tables 2, 3, 4, and 5).

In the St. Louis, Chicago I, and Chicago II poverty areas white workers' incomes average higher than black workers' incomes, as was hypothesized. In the San Antonio area the reverse is found, but it should be noted that the

Table 2. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

	Grand Mean = $5,438		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Race			
White	493	419	435
Negro	-245	-202	893
Other	758	-439	5
Ethnicity			
Spanish origin	-1,360	-924	17
Non-Spanish origin	18	12	1,316
Where Lived at Age 16			
This city	-213	-28	663
Suburb	-108	-864	20
Large city	442	-205	63
Medium city	132	260	52
Small city	404	232	250
Country	52	-444	39
Farm	107	87	157
No answer	-125	-212	89
Education			
7 years or less	-530	-531	253
8 years	63	-241	236
9 to 11 years	-455	-54	383
12 years	335	277	304
13 years or more	1,207	797	155
Job Training			
Yes	169	103	377
No	-67	-40	956
Veteran Status			
Veteran	582	114	609
Non-Veteran	-489	-96	724

Table 3. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = $4,819 Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Race			
White	-52	83	1,747
Negro	349	-628	238
Other	2,855	1,465	3
Ethnicity			
Spanish origin	-188	-163	1,549
Non-Spanish origin	664	574	439
Where Lived at Age 16			
This city	-126	14	1,177
Suburb	457	45	17
Large city	21	-204	80
Medium city	162	-100	105
Small city	181	-50	416
Country	-163	-370	17
Farm	460	368	98
No answer	56	3	78
Education			
7 years or less	-518	-366	716
8 years	195	151	191
9 to 11 years	-235	-37	405
12 years	485	388	464
13 years or more	1,059	391	204
Job Training			
Yes	651	163	639
No	-309	-77	1,349
Veteran Status			
Veteran	1,016	182	814
Non-Veteran	-705	-126	1,174

Table 4. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

Characteristic	Grand Mean = $5,979		Number of Cases
	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	
Race			
White	126	101	971
Negro	-257	-213	625
Other	560	499	69
Ethnicity			
Spanish origin	-496	-412	406
Non-Spanish origin	160	133	1,259
Where Lived at Age 16			
This city	117	13	547
Suburb	895	487	30
Large city	-75	-81	197
Medium city	457	541	109
Small city	-23	67	476
Country	-905	-870	43
Farm	-201	-198	149
No answer	-403	-261	114
Education			
7 years or less	-555	-257	313
8 years	-59	-160	293
9 to 11 years	-405	-146	462
12 years	278	211	367
13 years or more	1,219	519	229
Job Training			
Yes	500	201	380
No	-148	-59	1,285
Veteran Status			
Veteran	470	-83	518
Non-Veteran	-212	38	1,147

Table 5. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

	Grand Mean = $5,981		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Race			
White	1,003	697	212
Negro	-154	-106	1,200
Other	-827	-627	33
Ethnicity			
Spanish origin	96	311	71
Non-Spanish origin	-5	-16	1,374
Where Lived at Age 16			
This city	274	192	574
Suburb	18	201	15
Large city	151	343	96
Medium city	-148	-25	117
Small city	-191	-216	294
Country	-478	-675	33
Farm	-406	-230	187
No answer	-55	-113	129
Education			
7 years or less	-567	-462	209
8 years	-90	-224	209
9 to 11 years	-438	-171	442
12 years	562	402	381
13 years or more	635	383	202
Job Training			
Yes	64	-25	318
No	-18	7	1,127
Veteran Status			
Veteran	477	28	598
Non-Veteran	-337	-20	847

white category includes primarily workers of Spanish origin. When the effects of the other predictors in the analysis (including "ethnicity", the variable dealing with Spanish origin) are controlled, all four areas follow the hypothesized pattern.

Skin color, however, is not a primary reason for the income differences among the workers within each poverty area. In two of the areas it cannot be a major variable because most of the workers in each area are of the same race. In the Chicago II ghetto there is a sizable difference in average income between black and white workers (whites average $1,157 more per year than blacks), but only fifteen percent of the workers are white. In the San Antonio barrio only twelve percent of the workers are black. There are sizable proportions of black and white workers in both the St. Louis and Chicago I areas, but the average income differences by color are not very large in either area.

Ethnicity. In St. Louis, San Antonio, and Chicago I Spanish-origin workers are more likely to receive less income than non-Spanish-origin workers, but in Chicago II the pattern is reversed. Moreover, these relationships hold even when the effects of the other variables are controlled. In the St. Louis and Chicago II samples the proportions of Spanish-origin workers are quite small (about one percent and five percent respectively). Therefore, ethnicity cannot account for much of the income variation among the workers within these two areas. In the San Antonio area the majority of workers are of Spanish origin, but there is also a sizable minority (22 percent) of non-Spanish-origin workers. In the Chicago I area, non-Spanish-origin workers are in the majority, but the proportion of Spanish-origin workers is also relatively large (24 percent).

In the San Antonio area the average annual income level for Spanish-origin workers is $852 lower than the level for non-Spanish-origin workers.

In the Chicago I area the average for Spanish-origin workers drops $656 below the level for non-Spanish-origin workers.

Where Lived at Age 16. Our hypothesis that the poverty-area workers who migrated from rural areas or small cities would have higher incomes is partially supported by the findings for St. Louis and San Antonio, but not supported at all by the findings for the Chicago poverty areas.

In St. Louis, the average income levels for workers from small cities, open country areas, and farms are above the grand mean, but so are the average levels for workers from medium and large cities. However, the average income levels for poverty area workers who are native St. Louis residents or from suburbs near a large city fall below the sample mean.

In San Antonio, the incomes for workers from farms and small cities average above the grand mean, while the incomes for the few in our sample who came from open country areas (17 cases) average below the grand mean. Migrants from the larger cities and the suburbs also earn higher incomes, but the many workers who grew up in San Antonio more frequently receive lower incomes.

In the Chicago poverty areas the pattern is almost the reverse of what we find in the other two areas. Workers who grew up in Chicago have higher incomes than the migrants from rural areas, small cities, and some of the larger cities. Also having higher average income levels are workers from the suburbs. Moreover, Chicago I workers from medium-sized cities have higher incomes and Chicago II workers from large cities achieve higher incomes.

After controlling for the effects of the other variables, we see some changes in the patterns of relationship. Nevertheless, the St. Louis area findings still indicate partial support for our hypothesis, while the two Chicago area findings continue to show the reverse of our hypothesis. For the San Antonio area, the data no longer support the hypothesized pattern except for workers in the farm-origin category, where the average income remains at the highest level.

Education. In all four poverty areas the general pattern is for income level to be positively correlated with educational level, which is the relationship that we hypothesized. Our data, however, do show one exception to the hypothesized pattern. In each area, workers with 8 years of schooling earn more than workers with 9 to 11 years of schooling. This situation may result from age and experience modifying the influence of educational level. Many of those with 8 years of schooling may be older workers who entered the labor force during a time when a grade school education met the qualifications set by many employers. In contrast, a large proportion of those with 9 to 11 years of schooling may be younger workers who find that they have failed to meet the minimum educational standards currently required of new entrants seeking better-paying jobs.

Some evidence that this may be the case is shown in the adjusted deviations from the grand mean in Tables 2, 3, 4, and 5. After holding all of the other independent variables constant, including age, we find that in each area, except San Antonio, the average income for workers with 8 years of schooling drops below the income level for workers with 9 to 11 years of schooling. These figures for the St. Louis and Chicago I workers show a regular progression in income level with each increase in educational level. A similar pattern also occurs in the Chicago II area, except that workers with 13 or more years of schooling receive slightly less income than workers with 12 years of schooling.

Further examination of the unadjusted figures reveals that there are sizable differences in average income levels between workers in the various educational categories. For example, the average income for workers in the

St. Louis poverty area with less than 8 years of schooling is $530 below the grand mean, while the average income for workers in the same area with more than 12 years of schooling is $1,207 above the grand mean.

Job Training. The MCA findings in Tables 2, 3, 4 and 5 support our hypothesis that average incomes would be higher for workers who had received some type of job training than for those who had not received any training. This pattern also holds for each area, except Chicago II, after controlling for the effects of the other variables.

The average annual income level for workers with training exceeds the average level for those without training by $236 in the St. Louis area, $960 in the San Antonio area, $648 in Chicago I, and $82 in Chicago II. These income differences are considerably smaller than the differences we found between the highest and lowest educational groups.

Veteran Status. Average incomes are higher for veterans than for non-veterans in all four poverty areas. However, while the hypothesized pattern is found in all of the areas, the extent of the income difference between veterans and non-veterans varies considerably. Workers in the San Antonio area who are veterans average $1,721 more per year than do those who are not veterans; in the St. Louis area the average income gap between veterans and non-veterans is $1,071. On the other hand, in Chicago II the average income difference between veterans and non-veterans is $814 and in Chicago I it is only $682. However, after controlling for the effects of the other variables, the income difference between veterans and non-veterans is quite small in each area.

Age. The detailed MCA findings for age and three other current personal characteristics (marital status, relation to head, and family size) are presented in Tables 6, 7, 8, and 9. Our hypothesis that incomes would be highest for prime-age workers (25-54 years), next highest for older workers (55-64 years), and lowest for younger workers (16-24 years) is completely supported by the findings in St. Louis and partially supported by the findings for the other areas. In the San Antonio and Chicago areas workers 16 to 19 years old average lowest in income, followed by workers 20 to 24 years old, and then by workers 60 to 64 years old. But we also find in these three areas that workers 55 to 59 years old average higher in income than workers in one or more of the categories within the 25 to 54 year range. Thus, in the St. Louis and two Chicago poverty areas, the peak-income years extend five years longer than we hypothesized. In all of the areas the sizes of the deviations below the grand mean are quite large for the younger workers.

After adjusting for the effects of the other variables, the deviations from the grand mean in each area are reduced, but are still sizable. Moreover, in each area the relationship between age and income continues to be quite similar to the pattern before adjustment.

Marital Status. Our predictions that married workers with wife present would have the highest average income, workers who never married would have the lowest average income, and workers in all other marital-status categories would have intermediate incomes was completely accurate for the St. Louis, San Antonio, and Chicago II samples and partially accurate for the Chicago I sample. In the Chicago I area the deviation from the predicted pattern is that the average income for married workers with spouse absent is as low as the average income for workers who have never married.

After controlling for the other variables in the study, the hypothesized pattern still occurs in the St. Louis and San Antonio samples and partially holds in the two Chicago samples.

Table 6. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

	Grand Mean = $5,438		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Age			
16 to 19 years	-3,201	-1,439	87
20 to 24 years	-1,327	-886	132
25 to 34 years	364	124	284
35 to 44 years	486	357	297
45 to 54 years	739	315	276
55 to 59 years	-16	150	132
60 to 64 years	32	-48	125
Marital Status			
Married, spouse present	515	258	857
Married, spouse absent	-437	-456	127
Divorced or widowed	-280	-301	107
Never married	-1,472	-540	242
Relation to Head			
Head with other relations in household	505	18	901
Head without relations in household	-216	443	164
Non-relative of head, with own relations in household	-2,053	-824	2
Non-relative of head, without relations in household	287	1,103	42
Other relative of head	-1,910	-597	224
Family Size			
1 person	-114	-305	206
2 persons	430	417	282
3 persons	-253	-255	231
4 persons	82	-11	176
5 persons	-115	-36	103
6 persons	-120	-170	122
7 persons or more	-128	144	213

Table 7. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = $4,819		Number of Cases
	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	
Age			
16 to 19 years	-2,931	-1,325	146
20 to 24 years	-1,207	-650	244
25 to 34 years	5	21	405
35 to 44 years	731	427	415
45 to 54 years	797	342	458
55 to 59 years	439	183	177
60 to 64 years	-178	-159	143
Marital Status			
Married, spouse present	436	140	1,424
Married, spouse absent	-554	-104	99
Divorced or widowed	203	134	104
Never married	-1,628	-561	361
Relation to Head			
Head with other relations in household	486	69	1,436
Head without relations in household	-64	832	123
Non-relative of head, with own relations in household	3,681	3,879	1
Non-relative of head, without relations in household	-944	-264	44
Other relative of head	-1,697	-505	384
Family Size			
1 person	-272	-529	168
2 persons	161	-221	309
3 persons	369	246	321
4 persons	109	20	299
5 persons	-83	24	289
6 persons	342	270	200
7 persons or more	-496	29	402

Table 8. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

	Grand Mean = $5,979		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Age			
16 to 19 years	-2,918	-1,596	77
20 to 24 years	-1,155	-748	229
25 to 34 years	313	181	450
35 to 44 years	300	226	346
45 to 54 years	401	256	365
55 to 59 years	803	344	128
60 to 64 years	-66	-44	70
Marital Status			
Married, spouse present	623	271	978
Married, spouse absent	-1,005	-650	167
Divorced or widowed	-51	-302	107
Never married	-1,055	-301	413
Relation to Head			
Head with other relations in household	572	-373	1,048
Head without relations in household	-164	1,914	277
Non-relative of head, with own relations in household	378	719	7
Non-relative of head, without relations in household	-1,950	918	108
Other relative of head	-1,539	-1,082	225
Family Size			
1 person	-675	-1,361	386
2 persons	167	59	289
3 persons	208	529	266
4 persons	494	521	242
5 persons	315	472	176
6 persons	227	476	114
7 persons or more	-230	541	192

Table 9. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

	Grand Mean = $5,981		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Age			
16 to 19 years	-3,120	-1,556	49
20 to 24 years	-982	-662	153
25 to 34 years	51	-155	313
35 to 44 years	277	306	298
45 to 54 years	547	338	377
55 to 59 years	461	449	141
60 to 64 years	-587	-492	114
Marital Status			
Married, spouse present	413	58	882
Married, spouse absent	-242	48	182
Divorced or widowed	-3	208	111
Never married	-1,185	-307	270
Relation to Head			
Head with other relations in household	420	-115	920
Head without relations in household	-221	1,308	230
Non-relative of head, with own relations in household	4,367	1,993	4
Non-relative of head, without relations in household	-1,204	-53	86
Other relative of head	-1,218	-970	205
Family Size			
1 person	-489	-575	316
2 persons	26	332	298
3 persons	387	161	240
4 persons	116	-119	174
5 persons	394	436	150
6 persons	13	-76	99
7 persons or more	-159	42	168

Relation to Head. It was hypothesized that household heads would earn more than non-heads. More specifically, it was predicted that incomes would range from highest to lowest according to the following ranking: 1) household heads with other relations in the household; 2) heads without relations in the same household; 3) non-relative of the head without own relations living in the same household; and 4) other relative of the household head. Workers classified as "non-relative of head with own relations in the household" were not included in the hypothesis because the sample sizes for this group were too small to be considered reliable estimates.

The findings completely follow the hypothesized ranking in the San Antonio and Chicago II poverty areas and partially follow this ranking in the St. Louis and Chicago I areas. In the St. Louis sample the hypothesized pattern holds for the highest and lowest income groups, but the rankings for the two intermediate groups are reversed. In the Chicago I sample the rankings for the two higher-income household types are as predicted while the rankings for the two lower-income household types are reversed.

After controlling for the other variables in the analysis, the pattern of relationship between household status and income in the St. Louis sample shows very little support for our hypothesis, but the patterns in the other three samples show partial support.

Family Size. We hypothesized that workers living with families of moderate size would have the higher incomes while workers not living with any relatives and those living with large families (seven persons or more) would have the lower incomes. This pattern does hold in three of the areas, but it is only partially supported in the St. Louis area, where it is the workers in three-person families who have the lowest incomes instead of the workers not living with any relatives. After adjusting for the other variable effects only partial support for our hypothesis is found in all four areas.

While the expected pattern generally appears in the unadjusted figures, the income differences among the family categories are not very large in most of the areas. It is interesting to find, however, that after adjustment in each area the average income level for workers not living with any family members drops further below the grand mean than it was before adjustment. Furthermore, before adjustment these workers form the lowest income group in only the two Chicago areas, while after adjustment they are the lowest income group in all four of the areas. We also find in the adjusted figures that the average income level of workers in large families rises from below to above the grand mean.

These data suggest, therefore, that family size does have a modest independent effect on worker income, though in the case of large families it is the reverse of what we expected.

Household Size. The findings for household size and years at present address (the last current personal variable) plus the data for four labor force variables (job-seeking method, health problem, age problem, and lack skill experience or education) are presented in Tables 10, 11, 12, and 13. Because some households include persons who are not family members, we included household size in addition to family size in our set of predictors. However, we were able to examine only three categories of households (one person, two persons, and three persons or more) because these were the only groupings provided in the CES data. With these categories we were able to separate those workers who were living alone from those who were not living with any relatives but still were living with other people.

We hypothesized that incomes would average highest for workers in two-person households, next highest for workers in three-person households, and

Table 10. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

	Grand Mean = $5,438		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Household Size			
1 person	-45	83	153
2 persons	320	-238	306
3 persons or more	-108	65	865
Years at Present Address			
1 year or less	-425	-160	419
2 to 5 years	126	171	387
6 to 10 years	246	-1	230
11 to 20 years	165	2	225
21 years or more	498	8	72
Job-Seeking Method			
State employment service	-1,403	-90	25
Directly to employer	-1,742	-1,509	83
Asked friends or relatives	-1,576	-699	59
Newspapers	-2,383	-2,465	8
Union	-905	-1,245	11
Private employment agency	-1,887	-522	9
Community organizations	-1,850	-631	9
All other methods	-1,478	-1,075	19
Did not look in past 12 months	484	331	989
No answer	-955	-784	121
Health Problem			
Yes	-668	-817	97
No	52	64	1,236
Age Problem			
Yes	-1,889	-890	54
No	80	38	1,279
Lack Skill, Experience or Education			
Yes	-753	-352	273
No	194	91	1,060

Table 11. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = $4,819		Number of Cases
	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	
Household Size			
1 person	-28	-312	121
2 persons	128	186	328
3 persons or more	-19	-14	1,533
Years at Present Address			
1 year or less	-755	-289	516
2 to 5 years	145	63	448
6 to 10 years	283	44	330
11 to 20 years	273	190	450
21 years or more	444	85	244
Job-Seeking Method			
State employment service	-2,192	-1,272	32
Directly to employer	-1,616	-741	197
Asked friends or relatives	-1,522	-426	140
Newspapers	-1,906	-1,269	30
Union	77	-248	9
Private employment agency	652	432	6
Community organizations	-2,810	-1,870	12
All other methods	-1,311	-1,033	32
Did not look in past 12 months	519	233	1,492
No answer	-1,165	-196	38
Health Problem			
Yes	-950	-743	218
No	117	91	1,770
Age Problem			
Yes	-928	-240	91
No	44	12	1,897
Lack Skill, Experience or Education			
Yes	-495	-48	546
No	188	18	1,442

Table 12. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

	Grand Mean = $5,979		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Household Size			
1 person	-643	-390	295
2 persons	183	254	324
3 persons or more	131	33	1,041
Years at Present Address			
1 year or less	-755	-314	640
2 to 5 years	242	-10	509
6 to 10 years	302	261	261
11 to 20 years	832	408	181
21 years or more	1,762	868	74
Job-Seeking Method			
State employment service	-1,105	-522	7
Directly to employer	-1,709	-956	146
Asked friends or relatives	-1,896	-1,042	90
Newspapers	682	419	16
Union	1,196	1,135	4
Private employment agency	92	297	13
Community organizations	-3,166	-1,738	17
All other methods	-2,317	-1,694	20
Did not look in past 12 months	527	289	1,218
No answer	-975	-502	134
Health Problem			
Yes	-1,523	-1,075	135
No	134	95	1,530
Age Problem			
Yes	-1,023	-373	81
No	52	19	1,584
Lack Skill, Experience or Education			
Yes	-746	-37	341
No	192	10	1,324

Table 13. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

	Grand Mean = $5,981		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Household Size			
1 person	-548	-1,067	209
2 persons	-69	-203	323
3 persons or more	147	317	908
Years at Present Address			
1 year or less	-491	-65	408
2 to 5 years	-25	-11	465
6 to 10 years	247	8	267
11 to 20 years	314	8	224
21 years or more	932	339	81
Job-Seeking Method			
State employment service	-1,771	-1,468	11
Directly to employer	-1,708	-1,183	75
Asked friends or relatives	-2,054	-1,331	59
Newspapers	-1,483	-1,281	12
Union	1,454	234	12
Private employment agency	-1,731	15	4
Community organizations	-1,948	-1,944	3
All other methods	-603	147	4
Did not look in past 12 months	387	269	1,144
No answer	-1,310	-883	121
Health Problem			
Yes	-653	-366	111
No	54	30	1,334
Age Problem			
Yes	-1,000	-169	36
No	26	4	1,409
Lack Skill, Experience or Education			
Yes	-493	161	273
No	115	-38	1,172

lowest for workers living alone. The findings for San Antonio and Chicago I support our hypothesis, and the findings for St. Louis and Chicago II partially support our hypothesis. In St. Louis the incomes for workers in the largest household category rank even lower than the incomes for workers who live alone. In contrast, the average incomes for Chicago II workers in the largest household category are the highest in the sample.

After controlling for the other variables, the hypothesized patterns still appear in San Antonio and Chicago I. The Chicago II pattern continues to be the same after adjustment, while the St. Louis pattern becomes completely opposite to the hypothesized pattern: the largest household category ranks highest, the one-person category ranks next highest, and the two-person household ranks lowest.

In each area the income differences between the three categories are not very large before adjustment. After adjustment, the income differences do not change very much except in the Chicago II area, where they do become much greater, particularly for the one-person category in which the income level drops from $548 to $1,067 below the grand mean. The income level for workers in two-person households drops from -$69 to -$203, while the level for workers in the largest households increases from $147 to $317 above the grand mean.

Years at Present Address. We hypothesized that workers who had not changed their place of residence for many years would be more likely to have higher incomes than workers who had shifted their residential location more recently. In other words, we proposed that permanence was more likely either to raise income levels or to result from higher income levels. Specifically, we predicted that income level would have a positive association with the number of years a poverty area worker had lived at his present address.

Our findings completely follow this pattern in the two Chicago areas and partially follow it in the other two areas, where the deviations from the predicted pattern of relationship are minor. In the St. Louis, San Antonio, and Chicago I samples, only workers with one year or less at their present address average below the grand mean. In Chicago II this group also has the lowest average incomes, but workers in the "2 to 5 years" category also average slightly below the grand mean. The strength of this relationship appears to be greatest in the San Antonio and Chicago I samples. In the latter group, workers who have spent 21 years or more at their present address average $2,517 more per year than workers who have resided one year or less at their present address.

Of course, this measure probably is correlated to some extent with differences in workers' ages and some of the other current personal variables in this study. After controlling for the effects of all of the other variables in this study, we find that the patterns of relationship between years at present address and income remain essentially the same as the patterns before adjustment, but the income differences between workers in the various categories are sharply reduced. The widest income gap between the longest-term and shortest-term residents is still in Chicago I, but the amount decreases from $2,517 to $982. In the St. Louis sample the income difference drops from $923 before adjustment to only $168 after adjustment.

Job-Seeking Method. Given the small number of cases in some of the categories of job-seeking method (State Employment Service, newspapers, union, private employment agency, and community organizations) we did not propose a detailed income ranking of the job-seeking methods in our hypothesis. Instead, we simply divided the various methods into two groups: higher-income versus lower-income. Specifically, we predicted that incomes would average higher for workers who did not look for another job in the past 12 months, or if they did look, incomes would be higher for those who asked friends or relatives, registered with a union, or checked with a private employment agency to get their present or most recent job. Lower incomes were predicted for workers who either applied directly to an employer, checked with the State Employment Service, checked with community organizations, or checked with the newspapers.

Only in the San Antonio area do the categories divide as predicted. However, in the other three poverty areas there is partial support for the hypothesis. The "number of cases" columns in Tables 10, 11, 12, and 13 reveal that in every area a sizable majority of the workers in our sample had not looked for another job during the previous year. And perhaps not unexpectedly, the average income for these workers was above the grand mean in each area.

Inspection of those findings that did not completely follow our hypothesized pattern reveals the following deviations from our predictions. In St. Louis the workers who used the State Employment Service were in the higher income group while those who used a private employment agency were in the lower-income group. In Chicago I workers who asked friends or relatives ranked in the lower half of the income categories, while those who used newspapers ranked in the upper half of the income categories. In Chicago II workers who went directly to the employer or used newspapers ranked in the upper half, while those who asked friends or relatives or who used a private employment agency ranked in the lower half of the income groups. Thus the only job-seeking methods that ranked as predicted in all four areas were checking with a union and checking with community organizations.

After controlling for the effects of the other variables in the study, we find that San Antonio continues to follow the hypothesized pattern. The other three areas continue to partially support the hypothesized pattern, with St. Louis and Chicago II showing some changes in their patterns of deviation.

The only job-seeking method that ranks as predicted in all four areas is using a private employment agency. However, each of the other methods except asked friends or relatives ranks as predicted in three out of the four poverty areas.

Health Problem. Our findings for this variable show that in each area those who said that they have a health problem affecting their employment situation do have a lower average income level than those who said that they did not have this type of problem. The difference between the average annual income for those who responded "yes" and those who responded "no" to this question ranges from $707 in Chicago II to $1,657 in Chicago I. After controlling for the effects of the other variables in the study the predicted pattern still holds in each area and the deviations from the grand mean continue to be sizable.

The proportion of workers affected by this problem in each of our samples is probably high in comparison with the non-poverty-area workers in the St. Louis, San Antonio, and Chicago metropolitan areas. However, the proportions are too low to be able to account for a major proportion of the total income variation among poverty-area workers.

Age Problem. Workers in the younger and older age categories who said that their age is a handicap either in holding a job, finding a better job, in looking, or in wanting a job are an even smaller group than those with a health problem. (Some workers, however, may be in both groups.) But this category does sort out a segment of the labor force whose incomes average lower than the rest of the labor force. The difference in average income between those who said that they have an age problem and those who said that they do not have a problem ranges from $972 in San Antonio to $1,969 in St. Louis.

After holding constant the other variables in the study, the hypothesized pattern continues to show, but the income differences decline considerably.

Undoubtedly, this variable is highly intercorrelated with the variable in our study that measures the different age categories. Also, with the small proportion of workers who indicated that age is a problem this variable does not have the ability to explain much of the total variation in worker income in each poverty area, before or after controlling for the other variables.

Lack Skill, Experience, or Education. According to the findings in Tables 10, 11, 12, and 13, this attitudinal variable also follows the expected pattern. Workers who said that the reason they either are not holding a job, not finding a better job, not looking, or not wanting a job is because they lack skill, experience, or education do have a lower average income than the rest of the workers in their poverty area.

The number of workers who answered "yes" to the question about this problem is larger than the corresponding numbers for the age problem and health problem questions. However, the average income differences between those who answered "yes" and those who answered "no" are not as large for this variable as the income differences between the "yes" and "no" groups in the age problem and health problem variables. Moreover, the differences become quite small, particularly in San Antonio and Chicago I, after controlling for the effects of the other variables in the study. In Chicago II the adjusted figures show the reverse of the hypothesized pattern, but the average income difference is only $199.

Occupation. Tables 14, 15, 16, and 17 provide the detailed MCA statistics for the last three labor force variables (occupation, industry, and class of worker) in our analysis. Our hypothesis about the impact of occupation on income level combines the findings for eleven occupational categories into four groups. Specifically, it was hypothesized that the highest incomes would go to workers in the "professional and technical" and "managerial and administrative" categories; next highest for workers in the "sales" and "clerical" and "craftsmen and foremen", categories; next highest for workers in the "operatives, except transportation", and "transport equipment operatives" categories, and lowest incomes for workers classified as "laborers, except farm", "service, except private household", "private household workers", or "all farm workers". However, because of the very small sample sizes for the private household workers and all farm workers, we have not included the MCA findings for these two categories in our evaluation of this hypothesis. The income ranking that we have hypothesized for the four occupational groups follows the order of the occupational categories in Tables 14, 15, 16, and 17, with the highest income occupations starting on the top two lines.

The unadjusted figures for the St. Louis and San Antonio poverty areas show that occupation is related to income as we predicted. In the two Chicago poverty areas there is partial support for the hypothesized pattern. In both areas the incomes of clerical workers are in only the third highest group, while the incomes of transport equipment operatives are large enough to be in the second highest group. Also, in Chicago II, professional and technical workers are in only the second highest income group, while craftsmen and foremen are in the highest income group.

After adjustment for the effects of the other variables, St. Louis is the only area where the hypothesized pattern holds completely. In San Antonio, transport equipment operatives drop from the third highest income group to the lowest group. Although five occupational categories change rank in each of the Chicago areas, the results for each area still partially follow the hypothesized pattern.

Table 14. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

	Grand Mean = $5,438		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Occupation			
Professional and technical	1,022	1,301	71
Managerial and administrative	1,625	1,223	44
Sales	9	-27	24
Clerical	761	395	124
Craftsmen and foremen	645	380	224
Operatives, except transportation	-210	-316	315
Transport equipment operatives	-114	-334	131
Laborers, except farm	-389	-337	162
Service, except private household	-987	-351	233
Private household workers	1,992	3,448	2
All farm workers	-4,355	-2,371	3
Industry			
Agriculture, forestry and fisheries	-2,615	-948	8
Mining	-1,238	-2,717	1
Construction	226	234	79
Durable goods manufacturing	322	413	369
Nondurable goods manufacturing	112	110	184
Transportation, communication and utilities	570	385	148
Wholesale and retail trade	-703	-458	200
Finance, insurance and real estate	-559	76	34
Business and repair services	-671	-526	56
Personal services	-437	-375	35
Entertainment and recreation	-1,341	-1,420	8
Professional services	-812	-996	127
Public administration	1,459	519	80
Class of Worker			
Private	-70	19	1,090
Government	680	185	178
Self-employed	-491	-812	60
Without pay in family business	-5,438	-4,481	1

Table 15. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

	Grand Mean = $4,819		
Characteristic	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Occupation			
Professional and technical	1,428	1,150	120
Managerial and administrative	1,460	1,069	122
Sales	-269	348	51
Clerical	1,167	253	190
Craftsmen and foremen	466	188	500
Operatives, except transportation	-444	-215	272
Transport equipment operatives	-339	-576	190
Laborers, except farm	-1,295	-501	247
Service, except private household	-931	-469	274
Private household workers	-1,698	-537	1
All farm workers	-1,361	-373	21
Industry			
Agriculture, forestry and fisheries	-1,233	-33	29
Mining	-1,354	-1,903	4
Construction	-734	-335	239
Durable goods manufacturing	-338	-128	149
Nondurable goods manufacturing	-220	70	149
Transportation, communication and utilities	312	410	121
Wholesale and retail trade	-617	-417	444
Finance, insurance and real estate	-78	-285	48
Business and repair services	-314	-484	117
Personal services	-1,366	-968	100
Entertainment and recreation	-165	494	20
Professional services	-329	-419	163
Public administration	1,965	1,181	397
Class of Worker			
Private	-596	3	1,292
Government	1,270	-62	563
Self-employed	611	213	122
Without pay in family business	-3,161	407	3

Table 16. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

Characteristic	Grand Mean = $5,979		Number of Cases
	Deviation from Grand Mean (Dollars)	Adjusted Deviation from Grand Mean (Dollars)	
Occupation			
Professional and technical	1,478	892	101
Managerial and administrative	1,380	590	68
Sales	773	267	21
Clerical	-5	-186	173
Craftsmen and foremen	1,019	679	285
Operatives, except transportation	-452	-209	514
Transport equipment operatives	93	-468	122
Laborers, except farm	-859	-490	169
Service, except private household	-730	-141	203
Private household workers	-4,891	-2,510	3
All farm workers	-3,278	-2,292	6
Industry			
Agriculture, forestry and fisheries	-2,118	672	10
Mining	1,021	2,044	1
Construction	177	-244	80
Durable goods manufacturing	-12	164	556
Nondurable goods manufacturing	-156	-107	227
Transportation, communication and utilities	727	804	156
Wholesale and retail trade	-222	-352	249
Finance, insurance and real estate	681	499	48
Business and repair services	-61	-332	89
Personal services	-1,657	-1,165	54
Entertainment and recreation	1,236	778	7
Professional services	-41	-427	131
Public administration	914	498	56
Class of Worker			
Private	-131	-76	1,489
Government	711	377	128
Self-employed	2,416	1,474	46
Without pay in family business	-5,079	-2,219	1

Table 17. Relationship Between Annual Income and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

Characteristic	Grand Mean = $5,981 Deviation from Grand Mean (Dollars)	Grand Mean = $5,981 Adjusted Deviation from Grand Mean (Dollars)	Number of Cases
Occupation			
Professional and technical	236	652	79
Managerial and administrative	1,041	722	51
Sales	732	730	20
Clerical	45	-328	162
Craftsmen and foremen	1,036	524	227
Operatives, except transportation	-300	-158	311
Transport equipment operatives	209	56	153
Laborers, except farm	-612	-537	187
Service, except private household	-615	-127	253
Private household workers	1,269	2,048	2
All farm workers	--	--	--
Industry			
Agriculture, forestry and fisheries	-1,594	-2,075	3
Mining	-981	-2,355	1
Construction	813	634	112
Durable goods manufacturing	71	398	299
Nondurable goods manufacturing	-44	21	221
Transportation, communication and utilities	231	179	175
Wholesale and retail trade	-394	-146	243
Finance, insurance and real estate	-469	-860	42
Business and repair services	-754	-738	59
Personal services	-1,272	-1,149	57
Entertainment and recreation	-311	-1,741	5
Professional services	-312	-645	115
Public administration	1,395	572	105
Class of Worker			
Private	-190	-98	1,179
Government	933	497	208
Self-employed	1,111	285	48
Without pay in family business	-4,627	-3,509	2

The large differences in both the adjusted and unadjusted deviations from the grand mean suggest that in all of the areas the relationship of occupation to income is relatively strong. In San Antonio we find the widest range of income levels among the occupational categories. For example, the average income for professionals and managers is about $1,450 above the grand mean while the average income for nonfarm laborers is $1,295 below the grand mean.

Industry. The findings for industry in which a worker currently is employed, or if unemployed, the industry in which he last worked, are broken down in Tables 14, 15, 16, and 17 according to 13 categories. However, given the relatively small number of cases in some of the categories and the problem of sampling variability, we collapsed the 13 categories into two income groups in our hypothesis (higher income versus lower income). Furthermore, while nationally it may be possible to predict accurately how each industrial category of workers will rank, it was thought to be unlikely that these predictions would hold for local poverty areas, even if we were not using sample data. Unique conditions in each community could cause deviations from the average. Moreover, limiting the analysis to only poverty area workers might alter the rankings.

Therefore we hypothesized that incomes would average higher for workers in public administration; construction; transportation, communication, and utilities; manufacturing durables; and manufacturing non-durables. Incomes would average lower for workers in finance, insurance and real estate; wholesale and retail trade; business and repair services; personal services; professional services; entertainment and recreation; and agriculture, forestry, and fisheries. (Except possibly for San Antonio, the sample sizes for the last two industrial categories--entertainment, etc. and agriculture, etc.--are too small to provide reliable income estimates. Mining is not included in the hypothesis at all because of small sample sizes in all four areas.)

The unadjusted deviations from the grand mean reveal that St. Louis and Chicago II completely follow the hypothesized pattern while San Antonio and Chicago I partially follow the pattern. In Chicago I there are two categories that do not rank as hypothesized: workers in nondurable goods manufacturing are in the lower income grouping, while workers in finance, insurance, and real estate are in the higher income grouping. In San Antonio there are five exceptions to the hypothesis. Workers in construction and in durable goods manufacturing rank lower than predicted, while workers in finance, insurance, and real estate; business and repair services, and entertainment and recreation rank higher than predicted.

After controlling for the other variables in the study, we again find that St. Louis and Chicago II follow the hypothesized pattern while San Antonio and Chicago I only partially support the hypothesis. However, this time there are only three categories that deviate in the San Antonio area (agriculture, forestry, and fisheries; construction; and entertainment and recreation). Chicago I again has only two categories that deviate (construction; and finance, insurance, and real estate).

Inspection of the unadjusted deviations from the grand mean for the individual industrial categories (excluding those with a very small number of cases) reveals that some of them rank the same or nearly the same in all of the areas. Workers in public administration average highest in income in all four areas. In San Antonio the average is $1,965 above the grand mean and in St. Louis it is $1,459 above the mean. Chicago II with $1,395 above the grand mean is almost as high as St. Louis, while Chicago I is only $914 above the mean.

Workers in transportation, communication, and utilities rank second in income in each area except Chicago II, where they rank third. However, their incomes average considerably lower than the incomes for workers in public administration. Specifically, the averages above the grand mean are $570 in St. Louis, $312 in San Antonio, $727 in Chicago I, and $231 in Chicago II. (Construction ranks second in Chicago II with an average of $813.)

At the other end of the income scale we find that workers in wholesale and retail trade rank ninth in each area except Chicago II; there they rank seventh. The averages below the grand mean are -$703 in St. Louis, -$617 in San Antonio, -$222 in Chicago I, and -$394 in Chicago II.

Workers in personal services have the lowest averages in each of the areas except St. Louis. In the other three areas the deviations below the grand mean are -$1,366 in San Antonio, -$1,657 in Chicago I, and -$1,272 in Chicago II. In contrast, the deviation below the grand mean for personal services in St. Louis is only -$437.

Class of Worker. Our hypothesis that the highest incomes would be received by government employees, the next highest by employees of private companies or individuals, and the lowest by self-employed workers is supported by the St. Louis area findings, partially supported by the San Antonio findings, and not supported at all in the two Chicago area findings. In the San Antonio area, government employees have the highest average income followed by self-employed workers. Workers for private companies or individuals rank lowest. In both of the Chicago areas the self-employed workers rank highest, followed by government workers and then by private workers.

After holding the other variables constant, we find that the St. Louis area continues to follow the hypothesized pattern, the San Antonio and Chicago II areas show partial support, and Chicago I shows no support.

Summary of Patterns. Table 18 summarizes our presentation of the detailed MCA income findings for the 19 socioeconomic predictors. Specifically, this table provides the tally of the unadjusted and adjusted relationships between the predictors and income in each poverty area that follow, partially follow, and do not follow the patterns that were hypothesized at the beginning of the study.

Our score on the unadjusted relationships indicates that in each area the hypothesized patterns do occur for a majority of the predictors. For all of the remaining variables in St. Louis and most of the remaining variables in the other areas, the relationships with income partially follow the hypothesized patterns. After adjustment, the total number of predictors that relate to income as hypothesized stays the same in St. Louis, decreases slightly in San Antonio and Chicago I, and decreases substantially in Chicago II. However, all of the remaining predictors in San Antonio, and most of the remaining predictors in the other areas show at least partial support for the hypothesized patterns.

Examination of both the unadjusted and adjusted findings reveals that in the few cases in which hypothesized patterns are not supported, the cases do not occur in more than two areas for any one predictor. On the other hand, there are some predictors that follow the hypothesized pattern in all four areas (either before adjustment, after adjustment, or both before and after adjustment).

MCA Summary Statistics. Of importance, of course, is not only the pattern of a relationship, but also its strength. In reporting the patterns exhibited by the MCA findings we did make some references to the strength of these relationships. This was done when we described the amount by which the income levels for the various categories of workers deviated from the grand

Table 18. Summary of Relationships Between Socioeconomic Variables and Annual Income that Follow (F), Partially Follow (P), and do not Follow (N), Patterns Hypothesized

	Unadjusted Findings				Adjusted Findings			
	SL	SA	Ch.I	Ch.II	SL	SA	Ch.I	Ch.II
Antecedent Personal Variables								
Race	F	N	F	F	F	F	F	F
Ethnicity	F	F	F	N	F	F	F	N
Where Lived at Age 16	P	P	N	N	P	P	N	N
Education	P	P	P	P	F	P	F	P
Job Training	F	F	F	F	F	F	F	N
Veteran Status	F	F	F	F	F	F	N	F
Current Personal Variables								
Age	F	P	P	P	P	P	P	P
Marital Status	F	F	P	F	F	F	P	P
Relation to Head	P	F	P	F	N	P	P	P
Family Size	P	F	F	F	P	P	P	P
Household Size	P	F	F	P	N	F	F	P
Years at Present Address	P	P	F	F	P	P	F	F
Labor Force Variables								
Job-Seeking Method	P	F	P	P	P	F	P	P
Health Problem	F	F	F	F	F	F	F	F
Age Problem	F	F	F	F	F	F	F	F
Lack Skill, Experience or Education	F	F	F	F	F	F	F	N
Occupation	F	F	P	P	F	P	P	P
Industry	F	P	P	F	F	P	P	F
Class of Worker	F	P	N	N	F	P	N	P

mean, and the sample sizes in the categories. It was evident that some of the socioeconomic variables were better able than others to sort out the higher and lower income workers.

Now, however, we will provide a more precise and complete assessment of the impact of each variable on income level, both before and after adjusting for the other variables in the study. Tables 19, 20, 21, and 22 present MCA summary statistics that measure the relative strength of each predictor, singly and in competition with others. (They also include the AID summary statistics which will be discussed after the MCA presentation.) The Eta-squared coefficients in the first column of each table indicate the proportion of income variation in the total sample explainable by each predictor. These figures are based on the deviations of the unadjusted means (weighted for the number of cases) from the grand mean, which were presented in the previous section.

The Beta-squared statistics in the second column of each table are similar to the Eta-squared statistics, but are based on the deviations of the adjusted means (weighted for the number of cases) from the grand mean rather than the deviations of the raw means. Thus, the MCA Beta-squared coefficients indicate the relative importance of each variable in explaining variation with the remaining variables held constant. These Betas (before squaring) are analogous to standardized regression coefficients (beta weights). Therefore, they are not measures of the percent of variation explained by each variable with the other variables held constant.

At the bottom of each table is a multiple correlation coefficient (MCA R), adjusted for degrees of freedom. This coefficient when squared (MCA R^2) indicates the proportion of variation in income level explained by all 19 predictors together (after adjusting for degrees of freedom).

The MCA program does not compute F tests for determining the statistical significance of the relationship between each predictor and the dependent

Table 19. MCA and AID Summary Statistics for 19 Predictors of Annual Income, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area

Variable	MCA Eta^2	MCA Beta^2	AID Beta^2
Race	.015	.010	.000
Ethnicity	.003	.001	.000
Where Lived at Age 16	.008	.004	.031
Education	.039	.020	.011
Job Training	.001	.001	.000
Veteran Status	.035	.001	.000
Age	.126	.033	.103
Marital Status	.072	.015	.016
Relation to Head	.098	.015	.013
Family Size	.007	.008	.000
Household Size	.004	.002	.000
Years at Present Address	.011	.002	.000
Job-Seeking Method	.087	.045	.057
Health Problem	.004	.006	.000
Age Problem	.018	.004	.000
Lack Skill, Exp., or Ed.	.018	.004	.000
Occupation	.063	.034	.035
Industry	.053	.033	.022
Class of Worker	.014	.006	.009

MCA R^2 = .296

MCA R (adj.) = .544

AID R^2 = .298

Table 20. MCA and AID Summary Statistics for 19 Predictors of Annual Income, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, San Antonio Poverty Area

Variable	MCA Eta^2	MCA Beta^2	AID Beta^2
Race	.005	.009	.000
Ethnicity	.019	.014	.000
Where Lived at Age 16	.005	.002	.000
Education	.045	.017	.000
Job Training	.031	.002	.000
Veteran Status	.111	.004	.000
Age	.169	.039	.091
Marital Status	.098	.011	.000
Relation to Head	.117	.016	.000
Family Size	.015	.008	.000
Household Size	.002	.002	.000
Years at Present Address	.032	.005	.000
Job-Seeking Method	.133	.031	.062
Health Problem	.017	.011	.009
Age Problem	.006	.000	.000
Lack Skill, Exp., or Ed.	.014	.000	.000
Occupation	.128	.042	.071
Industry	.167	.068	.149
Class of Worker	.113	.001	.000

MCA R^2 = .448

MCA R (adj.) = .670

AID R^2 = .381

Table 21. MCA and AID Summary Statistics for 19 Predictors of Annual Income, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, Chicago (Area I) Poverty Area

Variable	MCA Eta^2	MCA Beta^2	AID Beta^2
Race	.006	.004	.000
Ethnicity	.011	.007	.000
Where Lived at Age 16	.009	.007	.000
Education	.044	.010	.006
Job Training	.010	.002	.000
Veteran Status	.013	.000	.000
Age	.094	.032	.008
Marital Status	.080	.015	.011
Relation to Head	.103	.121	.063
Family Size	.023	.078	.000
Household Size	.013	.005	.000
Years at Present Address	.062	.013	.011
Job-Seeking Method	.121	.039	.111
Health Problem	.027	.014	.006
Age Problem	.007	.001	.000
Lack Skill, Exp., or Ed.	.019	.000	.000
Occupation	.090	.031	.053
Industry	.031	.024	.019
Class of Worker	.031	.011	.000

MCA R^2 = .337

MCA R (adj.) = .580

AID R^2 = .289

Table 22. MCA and AID Summary Statistics for 19 Predictors of Annual Income, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, Chicago (Area II) Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	AID $Beta^2$
Race	.021	.010	.000
Ethnicity	.000	.001	.000
Where Lived at Age 16	.008	.006	.010
Education	.033	.018	.012
Job Training	.000	.000	.000
Veteran Status	.018	.000	.000
Age	.065	.025	.014
Marital Status	.042	.003	.007
Relation to Head	.053	.048	.017
Family Size	.011	.014	.000
Household Size	.007	.027	.000
Years at Present Address	.016	.001	.000
Job-Seeking Method	.075	.035	.072
Health Problem	.004	.001	.000
Age Problem	.003	.000	.000
Lack Skill, Exp., or Ed.	.006	.001	.000
Occupation	.041	.018	.037
Industry	.040	.030	.010
Class of Worker	.027	.007	.026

MCA R^2 = .201

MCA R (adj.) = .449

AID R^2 = .203

variable. However, the program output does include various sums of squares from which one can calculate several F Tests; but there is some danger of misinterpreting these measures. For example, the data in the predictor categories may not sufficiently meet the assumptions of an F test (e.g., normality and equal variances). Also, a relationship that is strong enough to be significant from a statistical standpoint (i.e., the differences between predictor category means are greater than that ascribable to sampling fluctuations) can be too weak to be important from a theoretical or policy perspective. Yet, because the relationship is statistically significant its importance may be overrated.

We did calculate some F ratios for a selection of predictors with Eta-squared and Beta-squared coefficients of various sizes. One F test we used is designed to answer the question, does this predictor all by itself explain a significant portion of the variation of the dependent variable? (For the formula, see Andrews, et al., 1967:99, 95-96.) Thus, it applies to the deviations of the unadjusted means from the grand mean. The second F test we used is set up to answer the question: would this predictor explain a significant portion of the variation of the dependent variable if we could hold constant the other predictors? (For the formula, see Andrews, et al., 1967:100, 95-96). Therefore, this F test is used to examine the strength of the adjusted deviations from the grand mean.

The results from our sample of F tests suggest that at least the variables with the largest Eta-squares and Beta-squares are statistically significant at the 5-percent level and in some cases also at the 1-percent level. By largest we mean the eight largest Eta-squared and eight largest Beta-squared coefficients shown for each poverty area.

There is some additional evidence about the true strength of each predictor, both before and after adjustment, because our study presents the Etas and Betas (squared) separately for each of the four poverty areas. In the following section we examine the strength of these summary statistics among the areas.

Given these considerations, we did not calculate F ratios for the rest of the MCA income relationships or for the other MCA findings reported in this study for the total sample. We did calculate some F ratios for the unemployment findings (see p. 138).

Comparison of Summary Statistics. Examination of the Eta-squared coefficients in Tables 19, 20, 21, and 22 reveals that certain predictors consistently show the larger figures. Moreover, most of the predictors with large Eta-squares also have larger MCA Beta-squares. We ranked the predictors according to the sizes of their summary statistics in each area and then computed the average (mean) rank in the four areas for each predictor. The final ranks of the predictors with the highest average ranks of Eta-squared and Beta-squared coefficients are as follows:

	Eta^2	Mean Rank		Beta^2	Mean Rank
1.	Age	1.8	1.	Job-Seeking Method	2.5
2.	Job-Seeking Method	2.0	2.	Industry	3.4
3.	Relation to Head	3.0	3.	Relation to Head	3.6
4.	Occupation	4.5	Tied {4.	Age	3.9
5.	Marital Status	5.3	5.	Occupation	3.9
6.	Industry	5.6	6.	Education	6.9
7.	Education	7.5	7.	Family Size	7.5
8.	Class of Worker	8.6	8.	Marital Status	8.5

We see that seven out of eight variables on the Eta-square list also appear on the Beta-square list. The variables appearing only once are class of worker, which ranks eighth on the Eta-squared list, and family size, which ranks seventh on the Beta-square list.

While there is not much difference between areas in the relative standing of all of the predictors within each area, there is a sizable difference between areas in the absolute values of the Eta-squared and Beta-squared scores. These differences are reflected in the MCA R-squared statistics, which show that the proportion of variation explained by the socioeconomic variables is highest in San Antonio (.448), followed by Chicago I (.337), St. Louis (.296), and finally Chicago II (.201). Thus, we find that the explanatory power of the independent variables taken together is over twice as high in San Antonio as in Chicago II.

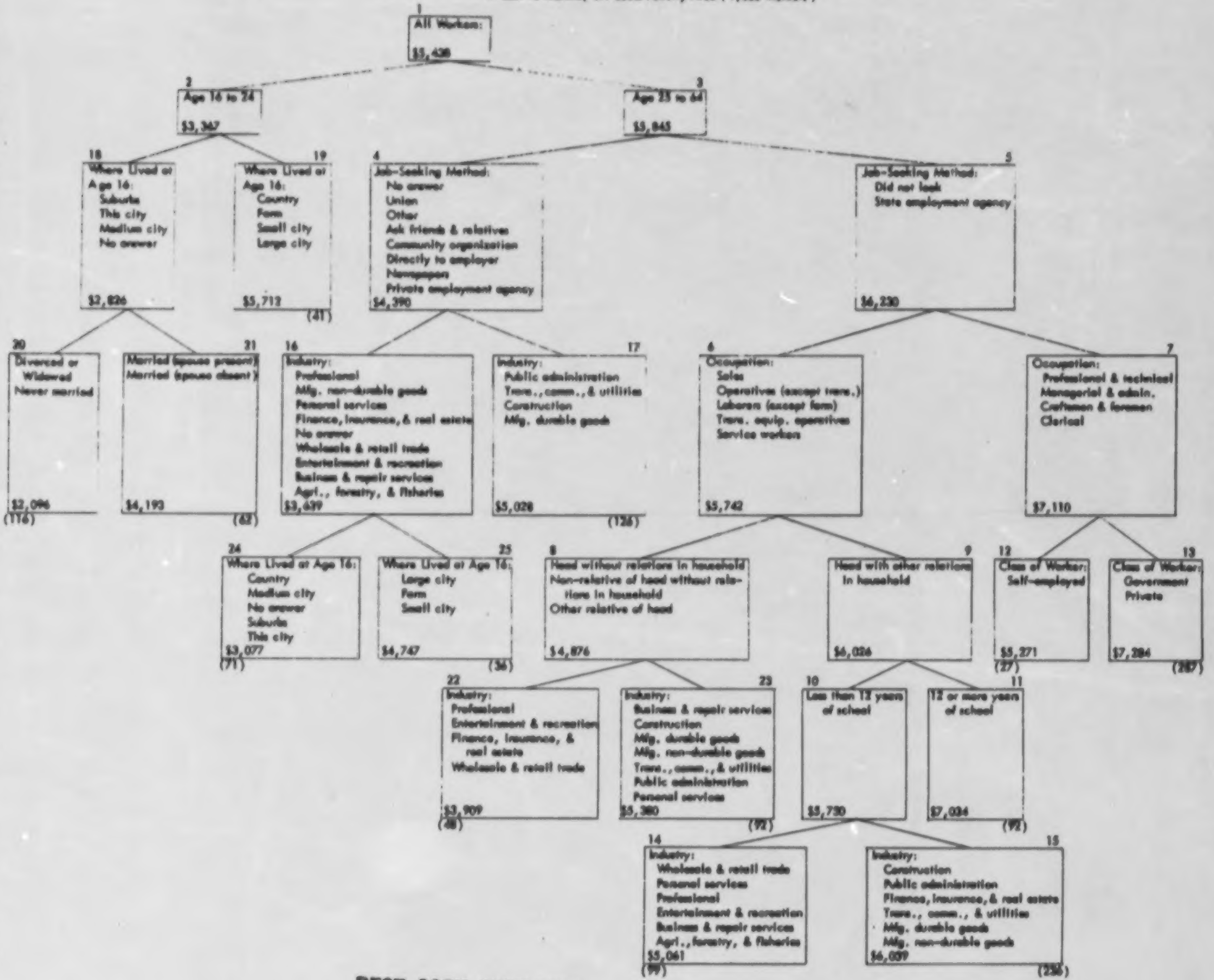
Probably a somewhat larger proportion of the variation would have been explained in each of the areas if more refined measures of our variables could have been devised. Nevertheless, it is apparent that some of the socioeconomic characteristics in our study are clearly associated with worker income levels. However, there are factors not included in our study that also determine how much money poverty area workers earn in a year.

AID Analysis

The discussion in Chapter 3 pointed out that the MCA approach assumes that the data are additive, but in the real world our predictors may also produce interaction effects. Consequently, the general effects of a predictor as shown by the MCA program may not actually be the same or even present in all parts of the sample.

Therefore, to search for these interaction patterns in the income data we used the Automatic Interaction Detector (AID) computer program. An example of how this procedure operates can be seen in Figure 1, which shows the AID "tree" for the St. Louis findings. Box number 1 refers to the total sample of workers and their mean income ($5,438). The incomes shown in the other boxes of the AID "tree" are the mean incomes for the subgroups of workers that have been subdivided from the total sample. The numbers in parentheses below some of the boxes tell how many workers are in each of the final groups.

Figure 1. Total Annual Income, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,330 Workers)


1
All Workers:
$5,438
2
Age 16 to 24
$3,367
3
Age 25 to 64
$5,845
18
Where Lived at Age 16:
Suburbs
This city
Medium city
No answer
$2,826
19
Where Lived at Age 16:
Country
Farm
Small city
Large city
$5,712
(41)
4
Job-Seeking Method:
No answer
Union
Other
Ask friends & relatives
Community organization
Directly to employer
Newspapers
Private employment agency
$4,390
5
Job-Seeking Method:
Did not look
State employment agency
$6,230
20
Divorced or Widowed
Never married
$2,096
(116)
21
Married (spouse present)
Married (spouse absent)
$4,193
(62)
16
Industry:
Professional
Mfg. non-durable goods
Personal services
Finance, insurance, & real estate
No answer
Wholesale & retail trade
Entertainment & recreation
Business & repair services
Agri., forestry, & fisheries
$3,639
17
Industry:
Public administration
Trans., comm., & utilities
Construction
Mfg. durable goods
$5,028
(126)
6
Occupation:
Sales
Operatives (except trans.)
Laborers (except farm)
Trans. equip. operatives
Service workers
$5,742
7
Occupation:
Professional & technical
Managerial & admin.
Craftsmen & foremen
Clerical
$7,110
24
Where Lived at Age 16:
Country
Medium city
No answer
Suburbs
This city
$3,077
(71)
25
Where Lived at Age 16:
Large city
Farm
Small city
$4,747
(36)
8
Head without relations in household
Non-relative of head without relations in household
Other relative of head
$4,876
9
Head with other relations in household
$6,026
12
Class of Worker:
Self-employed
$5,271
(27)
13
Class of Worker:
Government
Private
$7,284
(287)
22
Industry:
Professional
Entertainment & recreation
Finance, insurance, & real estate
Wholesale & retail trade
$3,909
(48)
23
Industry:
Business & repair services
Construction
Mfg. durable goods
Mfg. non-durable goods
Trans., comm., & utilities
Public administration
Personal services
$5,380
(92)
10
Less than 12 years of school
$5,730
11
12 or more years of school
$7,034
(92)
14
Industry:
Wholesale & retail trade
Personal services
Professional
Entertainment & recreation
Business & repair services
Agri., forestry, & fisheries
$5,061
(99)
15
Industry:
Construction
Public administration
Finance, insurance, & real estate
Trans., comm., & utilities
Mfg. durable goods
Mfg. non-durable goods
$6,039
(236)

BEST COPY AVAILABLE

Each box shows the variable categories that define a particular subgroup of workers sorted out from some larger grouping. Where there is more than one nominal category defining a subgroup, the categories are ranked according to their mean income score (starting with the highest category listed at the top of the box). In the boxes with interval variables, the categories have been collapsed into the largest possible categories.

Where a predictor such as age has a natural order, that order can be preserved in the AID division procedure, or the order can be left unspecified. In the latter case, the categories are reordered according to the level of the subgroup means on the dependent variable. We have not specified the category order of the variables in this study because we sought to determine their true order. In other words, we did not believe that it was appropriate to predetermine or force the relationship in an exploratory analysis such as this when this option of unspecified ordering was available. We knew that at least in the case of our measure of age, it was more likely that its relationship to income followed a curvilinear pattern rather than the natural order of the age groups in a linear pattern.

Examination of the results in Figure 1 reveals that the first AID split is on the variable "age". This indicates that splitting workers into age groups "16 to 24 years" and "25 to 64 years" reduces the income variance for the total sample more than a split on any of the other 18 predictors in the study. The specific proportion of variance explained by the age variable and each of the other variables with one or more splits is shown in the third column of figures in Table 19. The same predictor may be used again to further divide a subgroup, but for the St. Louis sample, neither age nor any of the other variables splits more than once in the formation of a final group.

We have interpreted the AID tree patterns by using models of "cumulative advantage," "cumulative disadvantage," and "alternative advantage." The left branch of the AID tree, which forms the lowest income group in the sample, is an example of cumulative disadvantage. The pattern of splits indicates that the possession of a series of characteristics or experiences leads to greater disadvantage. Workers age 16 to 24 years (group 2) from a suburb, St. Louis city, or a medium-size city (group 18), and who are divorced, widowed, or never married (group 20) average only $2,096 in annual income. There are, however, alternative characteristics possessed by some workers 16 to 24 years old that are associated with a more advantageous income level. If they are from the open country, a farm, a small city, or a large city other than St. Louis (group 19) their incomes average $5,712, which is $274 above the grand mean. Or, for those younger workers who had a less advantageous residential origin but are married, their incomes average still twice as high ($4,193) as the incomes for the lowest group.

Workers age 25 to 64 years split into 18 subgroups. The left branch of subgroups suggests that type of industry where employed and residential origin are determinants of cumulative disadvantage and alternative advantage for many workers who sought jobs during the previous year. Workers who used the State Employment Service or did not look for work during the year still exhibit a wide range of incomes. The branches for these workers show the interactions for occupation, household status, class of worker, industry, and education. The highest-income workers ($7,284) are in the white-collar occupations (except sales) or craftsmen and foremen (group 7) and work for the government or private employers (group 13). Workers in sales or the lower blue-collar jobs (group 6) split into a wide range of income classes. Heads with other relatives in the household (group 9) and with 12 or more years of school (group 11) average $7,034. If these household heads had less than 12 years of formal education (group 10) but work in one of the "right" industries (group 15) they still rank relatively high in income ($6,039), while their counterparts who are employed in the "wrong" industries average only $5,061 per year. Heads without relations in the household and non-household heads (group 8) also differ according to the industry in which they work. Those employed in the higher-paying industries average $5,380 a year while those employed in the lower-paying industries average only $3,909 in annual income.

Looking at the AID R-squared at the bottom of Table 19, we see that the AID procedure explains the same amount of variance as the MCA analysis (30 percent), but uses only nine of the 19 variables to do it. The AID Beta-square coefficients indicate the proportion of the total variation actually explained by each of the variables in the analysis. Thus, the AID coefficients sum to AID R-squared. (We rounded the AID Beta-square coefficients to three digits for presentation in our tables; consequently, in some cases their sum is slightly different from the R-squared figure, rounded to three digits, shown at the bottom of the table.)

The AID computer program considers 19 variables with a total of 101 categories (including some more "no answer" and "other" categories not shown in the tables) in determining what splits to make. Even if all the categories were constrained to a particular ordering for each split, after the twelve splits in the St. Louis analysis had been decided upon, the program would have selected from hundreds of possibilities. Since reordering of categories was allowed in our AID calculations, the number of possibilities explodes. Consequently, there is no point in considering statistical significance or degrees of freedom with respect to the AID findings. The focus, instead, is on increasing one's power to reduce predictive error.

When comparing the AID Beta-squared figures with the corresponding MCA Beta-squared and Eta-squared figures (see Tables 19, 20, 21, and 22) we discover that some variables that have little impact on the total sample are important determinants of income differences among certain subgroups of workers within a poverty area. In other words, a minor variable interacts with certain characteristics of one or more major variables and alters their influence.

The minor variables that appear in the AID trees for one or more areas are as follows:

St. Louis	San Antonio	Chicago I	Chicago II
Where Lived at Age 16	Health Problem	Health Problem Years at Present Address	Where Lived at Age 16

In St. Louis and Chicago II all of the major MCA variables appear in the AID trees. All of the major variables except class of worker also appear in the Chicago I AID splits. In San Antonio, however, relation to head, marital status, education, and class of worker are not included in the AID splits. Industry, occupation, age, and job-seeking method are the only major variables in the San Antonio AID model and health problem is the only minor variable. Yet, with only five variables, the San Antonio AID model explains a higher proportion of the total variation in income (.381) than the St. Louis (.298), Chicago I (.289), or Chicago II (.203) models.

Discussion of MCA and AID Findings

We carried out this analysis in order to learn more about the influence that developing employability, eliminating social discrimination, and changing economic institutions would have in the struggle against poverty. Specifically, we wanted to know: to what degree can low incomes be raised by upgrading the education, skills, health, work attitudes, ability to migrate, and job-seeking methods of the poor? Also, to what extent are low incomes the result of racial, ethnic, and age-group discrimination? Finally, how much are income levels affected by differences in ghetto workers' occupational and industrial attachments?

To search for answers to these questions we examined the correlates of differences in poverty-area workers annual incomes. Our data included 19 measures of the workers' socioeconomic characteristics, conditions, and experiences. We recognize, however, that in some cases a variable that we selected may not measure a concept very well or it might be an indicator of more than one concept. For example, "age" could be a measure of differences in physical stamina, or susceptibility to experiencing employer prejudice and discrimination, or both. As part of the discussion that follows, we will specify which concepts our variables represent.

Race and Ethnicity. Our measures of race and ethnicity are intended to reflect income differences that have come about because of discrimination or because of variations in subcultural life-styles and attitudes. The results show that race is not one of our stronger predictors of poverty. Ethnicity also is a weak indicator in three of the areas, but in San Antonio it does show some strength (the MCA Beta-squared ranks seventh).

There is, however, another finding pertaining to these variables that should be noted. As shown below, there is a positive association between the percentage of workers in each sample who are white and the proportion of variation explained by all of the socioeconomic predictors taken together (MCA R-squared) in each poverty area. There is also a tendency for the percentage of workers in each sample who are of Spanish origin to have a positive association with size of the MCA R-squared.

	Percent White	Percent Black	Percent Spanish	MCA R^2
San Antonio	87.9	12.0	77.9	.448
Chicago I	58.3	37.5	24.4	.337
St. Louis	32.6	67.0	1.3	.296
Chicago II	14.7	83.0	4.9	.201

We recognize that the odds of being born in poverty are greater for blacks and Chicanos than for Anglos. However, our data suggest that racial and ethnic differences between workers who live in the same poverty area is not a major reason for the income differences within each sample. The income advantage of non-Spanish workers over Spanish workers does account for a little more of the income variation in the San Antonio barrio, but the amount still is not very large.

On the other hand, the chances of breaking out of poverty for workers who are white or black, non Spanish or Spanish, appear to be greater in areas with larger white populations. In other words, we are suggesting that efforts to improve personal skills and to put workers in higher-status jobs in higher-wage industries are more likely to raise the incomes of workers, irregardless of race, who live in poverty areas having a majority of white residents. Thus racial and ethnic discrimination or cultural differences may have more impact on a poverty area's institutions than on its individuals.

Therefore, within each area the success of programs to eliminate poverty by changing socioeconomic characteristics and conditions appears likely to have similar results for workers who differ in race and ethnicity. It still, however, may be necessary to tailor programs to fit the special needs of various racial and cultural groups. Also, one should keep in mind the possibility that race and ethnicity may have more of an indirect than direct relationship to income differences within poverty areas by affecting such factors as educational level, job training, and health.

Veteran Status. This variable may measure differences between workers, particularly younger ones, in job training, work experience, and social maturity. It also may reflect employer discrimination. Veterans get extra points on civil service exams and sometimes they are given preference in other hiring situations.

Our findings show some rather sizable income advantages for veterans over non-veterans in St. Louis and San Antonio (perhaps because of the large number of government jobs in the latter area). However, when the other variables in our study are controlled, veteran status has little independent effect in any of the poverty areas. Thus, veteran status would appear to have indirect linkages to income through education, job training, occupation, and industry. Nevertheless, veteran status may be a good indicator for distinguishing those clients who would and would not fail in various employment and training programs.

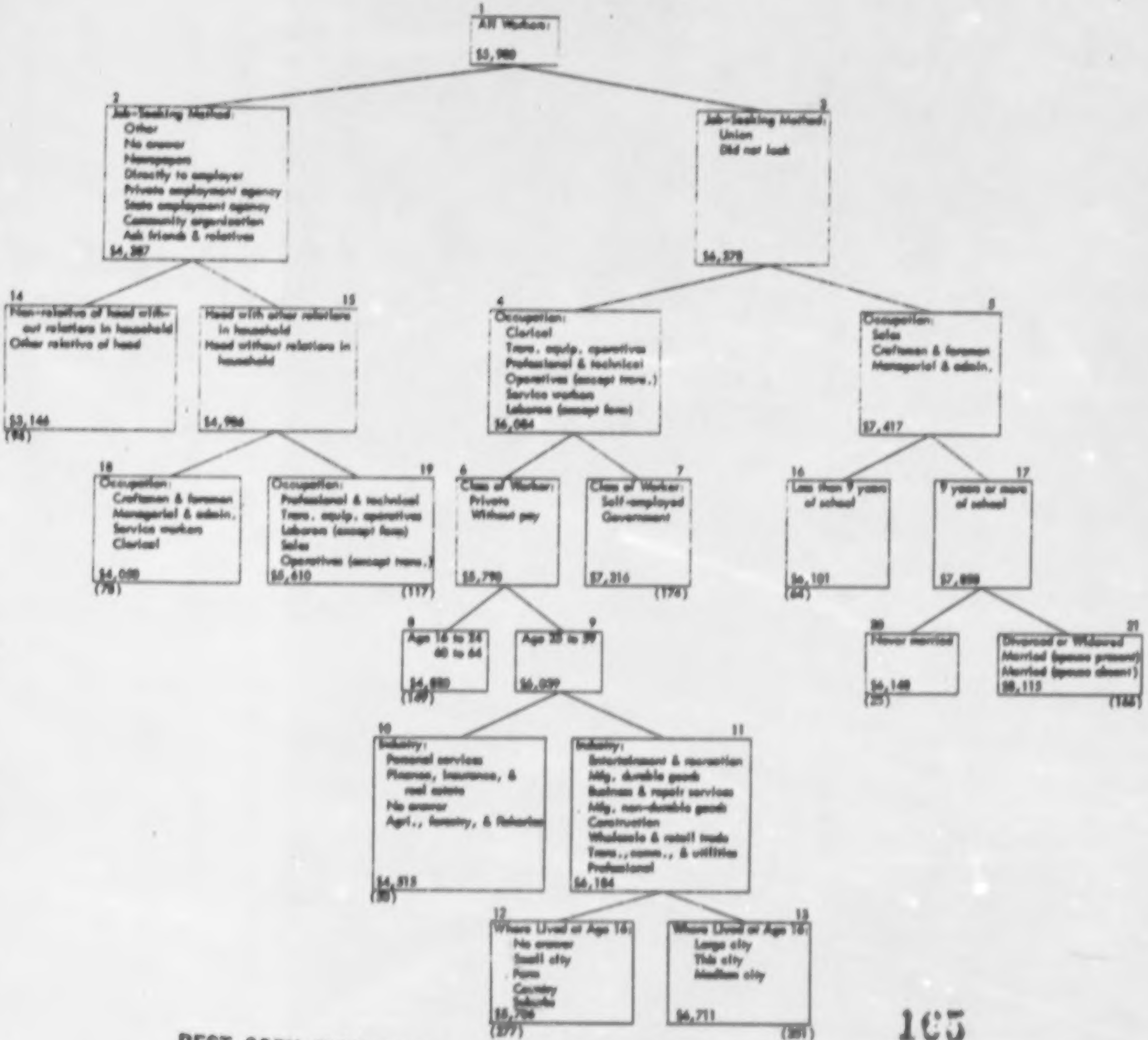
Where Lived at Age 16. This variable is designed to differentiate inmigrants from those who were reared in the city where the poverty area is located. Besides measuring mobility it measures any differences in work attitudes and other cultural characteristics that may be associated with various types of residential location along the rural-urban continuum.

As in the research that preceded this study, our findings for this predictor are contradictory. In the two Chicago areas the workers of local origin and from some of the larger cities and suburbs are more likely to earn more than migrants from small cities and rural areas. In St. Louis and San Antonio the relationship of residential background to income tends to be reversed. However, in each of the poverty areas this variable accounts for very little of the income differences among the workers.

From the AID analysis, however, we discover that residential origin is one of the variables that has a sizable impact on certain subgroups within the total sample. In Figure 1 we see that differences in residential origin separate the annual incomes of young workers (16 to 24 years old) in the St. Louis area by almost $3,000. In-migrants from another large city or rural areas earn $5,712 while workers mainly from St. Louis earn only $2,826. Residential origin also interacts in a similar pattern with some of the workers 25 to 64 years old whose incomes are below the grand mean. We see in Figure 2 that residential origin is an important predictor for a large number of prime-age workers in Chicago II whose incomes are in the middle range for that area. Workers reared in Chicago or another city of at least medium size are likely to earn $1,000 more than migrants primarily from rural areas.

These different effects from residential origin among the areas show the need for tailoring programs to local conditions. There may be important differences in the communities from which the various migration streams to poverty areas originate. Also, differences in poverty-area subcultures and community institutions may account for how native workers compare with the in-migrants.

Figure 2. Total Annual Income, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area 10) Poverty Area (1,448 Workers)


1
All Workers:
$5,980
2
Job-Seeking Method:
Other
No answer
Newspapers
Directly to employer
Private employment agency
State employment agency
Community organization
Ask friends & relatives
$4,287
3
Job-Seeking Method:
Union
Did not look
$6,278
14
Non-relative of head without relatives in household
Other relative of head
$3,146
(98)
15
Head with other relatives in household
Head without relatives in household
$4,986
4
Occupation:
Clerical
Trans. equip. operatives
Professional & technical
Operatives (except trans.)
Service workers
Laborers (except farm)
$6,084
5
Occupation:
Sales
Craftsmen & foremen
Managerial & admin.
$7,417
18
Occupation:
Craftsmen & foremen
Managerial & admin.
Service workers
Clerical
$4,050
(78)
19
Occupation:
Professional & technical
Trans. equip. operatives
Laborers (except farm)
Sales
Operatives (except trans.)
$5,610
(117)
6
Class of Worker:
Private
Without pay
$5,790
7
Class of Worker:
Self-employed
Government
$7,316
(174)
16
Less than 9 years of school
$6,101
(64)
17
9 years or more of school
$7,898
8
Age 16 to 24
60 to 64
$4,880
(169)
9
Age 25 to 59
$6,099
20
Never married
$6,148
(25)
21
Divorced or Widowed
Married (spouse present)
Married (spouse absent)
$8,115
(166)
10
Industry:
Personal services
Finance, insurance, & real estate
No answer
Agri., forestry, & fisheries
$4,815
(80)
11
Industry:
Entertainment & recreation
Mfg. durable goods
Business & repair services
Mfg. non-durable goods
Construction
Wholesale & retail trade
Trans., comm., & utilities
Professional
$6,184
12
Where Lived at Age 16:
No answer
Small city
Farm
Country
Suburbs
$5,706
(277)
13
Where Lived at Age 16:
Large city
This city
Medium city
$6,711
(201)

BEST COPY AVAILABLE

Thus, some of the contradictory findings in the research literature may reflect differences among areas of origin and also between areas of destination. The Chicago situations may result because the migrants to this city with farm or rural backgrounds are indeed handicapped by the social setting in which they grew up. At least, as Featherman (1971) and others have found, workers with a rural upbringing are more likely to start out with family handicaps and inferior educational attainment. Additional rural effects on status achievement independent of these other background variables is more debatable.

Differences between the Chicago patterns and those in St. Louis and San Antonio may also be associated with the migrants' length of residence in these areas and with attitudinal factors. Ritchey (1974) found that poverty decreases among white rural-urban migrants as duration of central-city residence decreases. Long and Heltman (1975:1,391) found that blacks moving from the South (primarily from rural areas) to the North (mostly to cities) had lower levels of education and had taken lower-status jobs than northern-born blacks. However, after a few years of residence in the North, southern-born blacks were able to earn higher incomes than northern-born blacks, apparently due in part to higher labor force participation rates. These results are interesting when considered along with Kuvlesky and Ohlendorf's (1968) findings that young black males in urban areas have higher occupational goal and expectation levels than young black males in rural areas, and the rural-urban differences are greater for the goals than for the expectations. Long and Heltman (1975:1,407) suggest that the southern-black migrants take jobs found unacceptable by northern blacks, who prefer to accept welfare over low-status, low-paying jobs.

One informant with first-hand knowledge of the St. Louis area suggested to us that young workers who were reared in the local poverty area receive considerable peer-group pressure to take only higher-status better-paying jobs. In contrast, young migrants from other cities do not have close friends who grew up in St. Louis, so they are not exposed to this pressure. Moreover, for the workers from rural areas, most of the lower-status, lower-wage jobs look better than anything available back home.

Education and Job Training. Our operational definitions of education, job training, and lack of skill, experience, or education are based on manifest indicators of these concepts (e.g., years of school completed). These variables are intended to provide overt measures of job skills as human capital elements in income determination. When one analyzes the whole range of occupations, from physician to janitor, the positive correlation of income with education and skill is said to indicate the importance of training programs for reducing poverty. However, as Bluestone, Murphy, and Stevenson (1973:20) suggest:

> . . . while the education/income correlation may be high for physicians measured against janitors, the human capital implication for those who do not aspire to a college degree may be misleading. For much of the working class, it may be more important to be in a high-wage industry at any level of skill than to be adequately skilled but trapped in an industry that offers only low wages. For many of the working poor, the problem may be in the industries in which they work, not in the skills they individually possess.

Therefore our study examines the relation of education and job training to income for workers primarily in the lower half of the social spectrum.

Of course, in addition to job skills, the education and job-training variables may also reflect differences in the workers' attitudes toward employment. For example, a person who completed high school may not be more qualified to perform the work on an automobile assembly line than a person who quit school in the tenth grade. However, the employer may select the high school graduate for the job on the assumption that he will be more reliable and responsible than the drop-out.

Our findings do show that years of school completed has a positive association with income level. However, some evidence suggests that for older workers their experience and tenure compensate for the fewer years of schooling that many have relative to younger workers. Even though education is one of the stronger variables in our findings, most of the variation in poverty-area workers' income levels still cannot be explained by differences in formal schooling. Actually, educational differences among the total population also do not account for a great deal of the income variation in this country (Jenks, _et al_. 1972). This is not too surprising when one thinks about it. Two graduates from a leading university who have about the same scores on standardized tests and who both come from upper-middle-class families will not automatically end up with similar incomes at the age of 50. One may be making a great deal of money as a successful lawyer while the other is not making very much money as a school teacher. The latter may not be poor, but there will be a tremendous gap between the income levels of those graduates. The average income for college graduates is higher than the average income for people who drop out of high school, but there is also a wide dispersion around each mean. Education alone cannot make people equal.

Our results show that the impact of job training on poverty workers' income levels is not as great as the impact from educational attainment. Workers with training do show some significant income gains in San Antonio and Chicago I, while the increases in St. Louis and Chicago II are negligible.

Our findings would probably show wider income differences between workers with and without job training if our measure of job training did not include workers in the CES category "any other training program," which includes the

Neighborhood Youth Corps (NYC). The small amount of basic education and on-the-job training provided by the NYC program is not likely to improve the employability and income level of the participants. Moreover, at the time the CES data were collected, the NYC program had been in operation for only about six years. Therefore, most of the workers who had participated in this program were still relatively young at the time of the survey, and this alone would have a depressing effect on the average income level of those with job training.

Job Corps, another program included in the "any other training" category, was established in 1964 and therefore was only six to seven years old at the time of the CES. Consequently, since this program, like the NYC program, was aimed at workers 16 to 21 years old, it too may have contributed a disproportionate number of young people to the "with job training" group in our sample.

Furthermore, while Job Corps does provide much more job training and basic education than does NYC, Job Corps enrollees often have serious social and/or physical handicaps to overcome. Consequently, their gains in earnings are not likely to be as large, especially in the short run, as those made by enrollees in many other kinds of job-training programs.

Lack of skill, experience, or education measures the worker's own perception about whether lack of one or more of these characteristics is an employment problem for him. Our data show that our variable does not differentiate the lower- and higher-income workers very well, especially after adjusting for the effects of the other variables. Thus, our variables education and age are probably better indicators of the characteristics named in this variable.

We were surprised that more workers in each sample did not say that lack of skill, experience, or education was an employment barrier. The percentages saying yes to this problem were 20 percent in St. Louis, 27 percent in San Antonio, 20 percent in Chicago I, and 19 percent in Chicago II. If these figures are relatively low we can speculate about the reasons why. One possibility is that some of the poverty-area workers do not realize that they have training or experience weaknesses that could be keeping their incomes so low. Another possibility is that some workers do not want to admit to interviewers that they do have human capital deficiencies and that they are causing employment and income problems. Or, some workers may not have answered yes to this question because they feel that the reasons for their employment problems stem primarily from the economic and political system rather than from personal inadequacies.

Age, Age Problem, and Health Problem. All three of these variables can be considered measures of health levels, since age differences show some correlation with physical stamina and illness. The two age measures also reflect differences in experience and stage of the family life cycle. Interpretation of the age data in regard to the latter concept will be discussed in the next section.

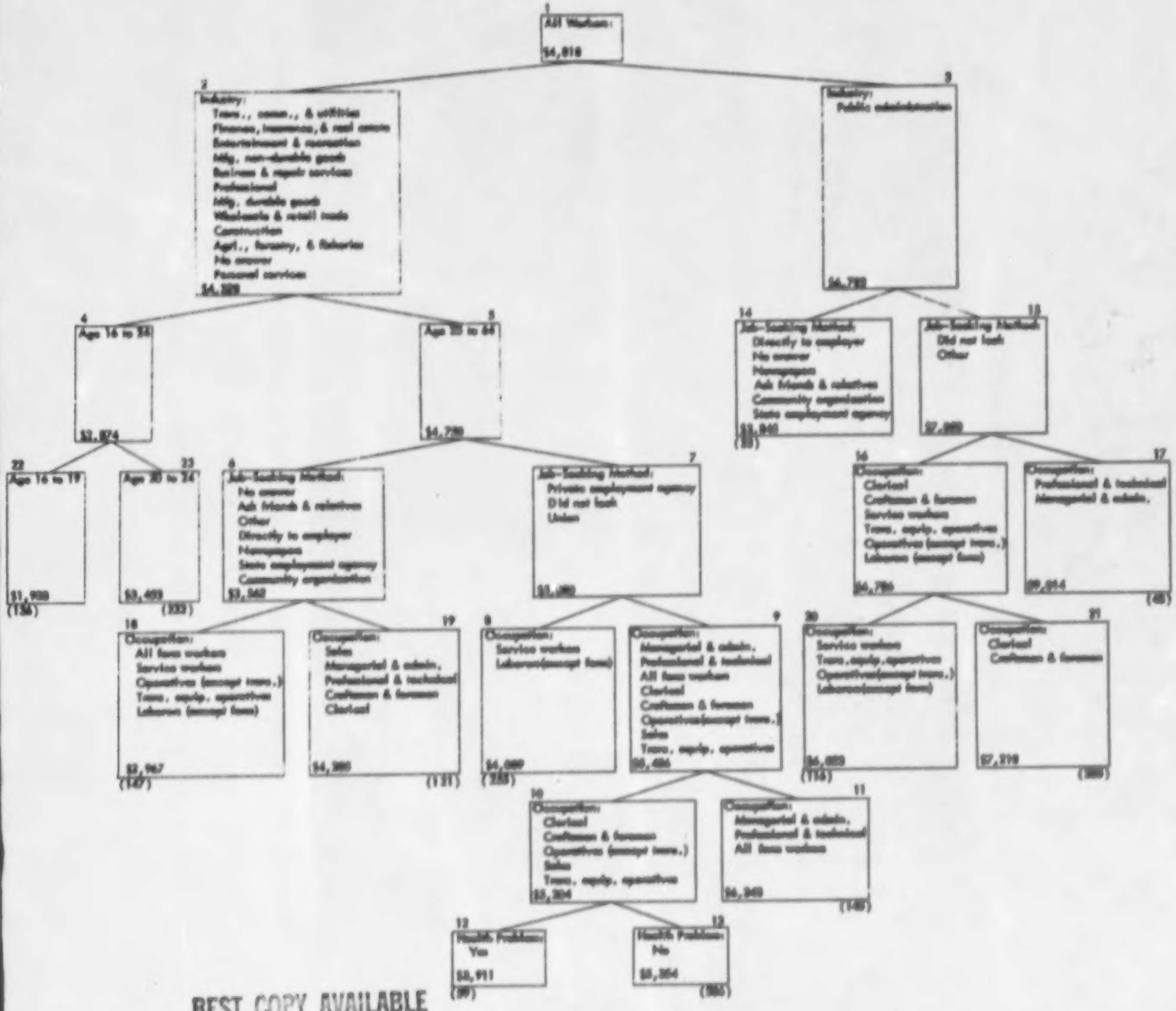
The association of workers' ages with their income levels is not much different in the ghetto or barrio from what it is in the rest of the society. It is one of the strongest predictors of income level in each of the areas that we studied. The correlation of age with income follows the expected curvilinear pattern, with the lowest incomes in the youngest years and the next lowest in the oldest working years. We find that the high income levels of the middle years are maintained in most of the areas until workers reach their sixties. The fact that incomes do not show a major decline any sooner may have something to do with the fact that even during the peak earning years poverty-area incomes are not very high above the average.

The number of workers who said that employers think that they are too old or too young is quite small, but their income levels do drop sharply below the average. Thus, while this variable explains very little of the total income variation in each area, it does sort out at least some workers who clearly need help in overcoming their age barriers, and who may already have some useful insights about their problem and the motivation to try to overcome it.

Our more direct measure of health indicates that about 8 percent of the workers in St. Louis and the two Chicago areas and about 11 percent in San Antonio believe that they have a physical problem affecting their employment situation. Health differences do not account for a large proportion of the total income variation in each area. Nevertheless, those workers who say that health hinders their employment do experience a rather sizable loss in income. Moreover, the MCA Beta-squared figures suggest that the influence of health is independent of many of the other socioeconomic determinants in our study. Thus, health sorts out a group of workers for whom the causal link to lower income appears to be fairly clear.

Yet, the AID analysis indicates that the health variable affects some groups of workers more than others. Figure 3 shows that in San Antonio health is an important factor for workers ages 25 to 64 in middle-status, non-governmental jobs who did not look for work, or if they did, they used more effective job-seeking methods (private employment agency or union). The average income for workers without a health problem (Group 13) is $536 above the grand mean, while the average income for workers with a health problem (Group 12) is $907 below the grand mean.

Figure 3 Total Annual Income, by Groups of Male Workers, 16 to 64 Years Old, Not In School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,986 Workers)


1
All Workers:
$4,818
2
Industry:
Trans., comm., & utilities
Finance, insurance, & real estate
Entertainment & recreation
Mfg. non-durable goods
Business & repair services
Professional
Mfg. durable goods
Wholesale & retail trade
Construction
Agri., forestry, & fisheries
No answer
Personal services
$4,329
3
Industry:
Public administration
$6,782
4
Age 16 to 24
$2,874
5
Age 25 to 64
$4,720
14
Job-Seeking Method:
Directly to employer
No answer
Newspapers
Ask friends & relatives
Community organization
State employment agency
$3,940
(30)
15
Job-Seeking Method:
Did not look
Other
$7,080
22
Age 16 to 19
$1,930
(136)
23
Age 20 to 24
$3,403
(333)
6
Job-Seeking Method:
No answer
Ask friends & relatives
Other
Directly to employer
Newspapers
State employment agency
Community organization
$3,562
7
Job-Seeking Method:
Private employment agency
Did not look
Union
$5,080
16
Occupation:
Clerical
Craftsmen & foremen
Service workers
Trans. equip. operatives
Operatives (except trans.)
Laborers (except farm)
$6,786
17
Occupation:
Professional & technical
Managerial & admin.
$9,014
(48)
18
Occupation:
All farm workers
Service workers
Operatives (except trans.)
Trans. equip. operatives
Laborers (except farm)
$2,967
(147)
19
Occupation:
Sales
Managerial & admin.
Professional & technical
Craftsmen & foremen
Clerical
$4,280
(131)
8
Occupation:
Service workers
Laborers (except farm)
$4,089
(253)
9
Occupation:
Managerial & admin.
Professional & technical
All farm workers
Clerical
Craftsmen & foremen
Operatives (except trans.)
Sales
Trans. equip. operatives
$5,486
20
Occupation:
Service workers
Trans. equip. operatives
Operatives (except trans.)
Laborers (except farm)
$6,059
(116)
21
Occupation:
Clerical
Craftsmen & foremen
$7,219
(300)
10
Occupation:
Clerical
Craftsmen & foremen
Operatives (except trans.)
Sales
Trans. equip. operatives
$5,204
11
Occupation:
Managerial & admin.
Professional & technical
All farm workers
$6,349
(140)
12
Health Problem:
Yes
$3,911
(39)
13
Health Problem:
No
$5,204
(365)

BEST COPY AVAILABLE

Figure 4 shows that in Chicago I health has a strong influence on the income levels of workers 25 to 59 years old who are in the higher household-status categories and who sought work using the less successful job-seeking methods. The average income level for those without a health problem (Group 21) is only $270 below the grand mean, while the income level for workers with a health problem (Group 20) drops to $1,789 below the grand mean.

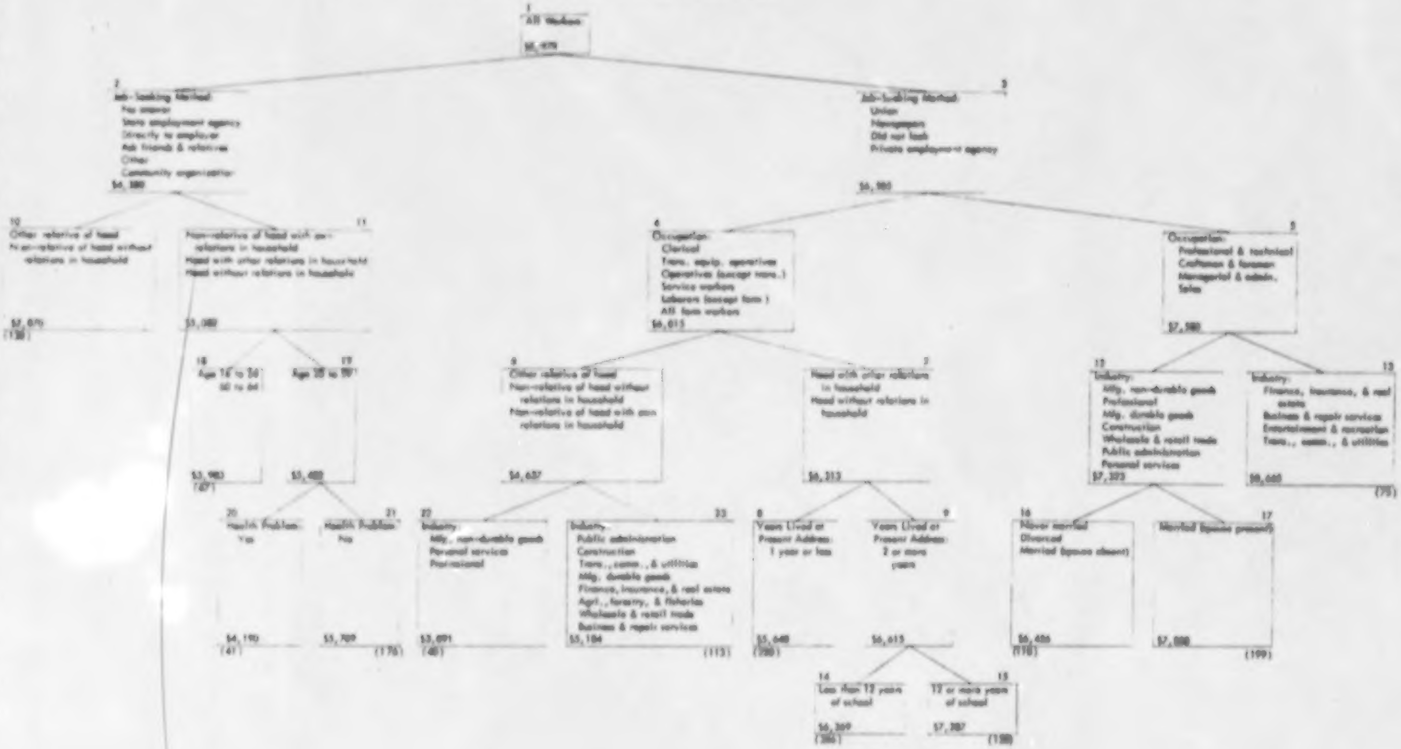
Thus, in both the San Antonio and Chicago I poverty areas we see that variation in health is not an important determinant of income differences among young workers 16 to 24 years old. Moreover, as the data suggest, health is less likely to affect the income levels of workers who are either in the higher-wage industries or in the higher-status occupations.

Family Structure. A number of our variables measure characteristics pertaining to the worker's family situation. These variables include marital status, relation to head of household (household status), family size, household size, and years at present address. Our age variable also is associated with stage in the family life-cycle.

Family structure is considered relevant from a human capital perspective because the responsibility of supporting a family would appear to provide an incentive for achieving a higher income level. Also, family life would appear to be supportive of stable social patterns. Thus the family variables may be indicators of differences in work attitudes and life-styles that affect employment success.

Our findings show that most of the family variables have a relatively strong and systematic relationship to poverty-area workers' income levels. Workers in the higher-income groups tend to exhibit the following family characteristics. The higher-income worker is more likely to be a household

Figure 4 Total Annual Income, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area 1) Poverty Area (1,666 Workers)


1
All Workers
$6,070
2
Job-Seeking Method:
No answer
State employment agency
Directly to employer
Ask friends & relatives
Other
Community organization
$6,380
3
Job-Seeking Method:
Union
Newspapers
Did not look
Private employment agency
$6,980
10
Other relative of head
Non-relative of head without relatives in household
$2,070
(138)
11
Non-relative of head with own relatives in household
Head with other relatives in household
Head without relatives in household
$5,080
18
Age 16 to 24
60 to 64
$3,983
(47)
19
Age 25 to 59
$5,480
20
Health Problem: Yes
$4,190
(41)
21
Health Problem: No
$5,709
(176)
4
Occupation:
Clerical
Trans. equip. operatives
Operatives (except trans.)
Service workers
Laborers (except farm)
All farm workers
$6,015
6
Other relative of head
Non-relative of head without relatives in household
Non-relative of head with own relatives in household
$4,637
22
Industry:
Mfg., non-durable goods
Personal services
Professional
$3,091
(40)
23
Industry:
Public administration
Construction
Trans., comm., & utilities
Mfg. durable goods
Finance, insurance, & real estate
Agri., forestry, & fisheries
Wholesale & retail trade
Business & repair services
$5,184
(113)
7
Head with other relatives in household
Head without relatives in household
$6,313
8
Years Lived at Present Address: 1 year or less
$5,640
(280)
9
Years Lived at Present Address: 2 or more years
$6,615
14
Less than 12 years of school
$6,309
(286)
15
12 or more years of school
$7,387
(138)
5
Occupation:
Professional & technical
Craftsmen & foremen
Managerial & admin.
Sales
$7,580
12
Industry:
Mfg., non-durable goods
Professional
Mfg. durable goods
Construction
Wholesale & retail trade
Public administration
Personal services
$7,373
16
Never married
Divorced
Married (spouse absent)
$6,426
(178)
17
Married (spouse present)
$7,898
(199)
13
Industry:
Finance, insurance, & real estate
Business & repair services
Entertainment & recreation
Trans., comm., & utilities
$8,660
(75)

BEST COPY AVAILABLE

head, in the middle working years (ages 25 to 59), who is married and living with his wife and a maximum of four children or other family members. Also, he has resided at the same address for at least six years.

In contrast, the lower-income worker is more likely to be either relatively young (18 to 24 years) or old (60 to 64 years). He is living alone because he has never married or else is separated, divorced, or widowed. If he does live with others he is not head of the household. Also, his residential location has changed within the past year.

In sum, the typology suggested by our findings shows the sharpest contrast in income between prime-age workers in the child-rearing stage of the family life-cycle with strong locational ties, versus the young or old single workers with weak residential commitments. The rationale for family life producing higher incomes would be that these workers have a healthy home life (sufficient rest, good diet, psychological support) and are motivated to get to work regularly and on time, not quit their job despite some disadvantages or problems, and maintain a cooperative relationship with their boss and co-workers.

Yet, according to Liebow's (1967) research, for some workers getting married, raising children, and having good work habits does not produce a higher income. They may work full-time and full-year, but they still remain in poverty and therefore cannot continue to support a growing family. As a result, these workers eventually are forced to desert their families in order to maintain their self-respect. Thus as Goodwin (1972:18) found, it is repeated experiences of failure, not "deviant goals or deviant psychology," that explains the differences in life-style, family stability, and work orientation between the poor and nonpoor.

The question raised by Liebow and Goodwin's findings is whether our results indicate that family structure is a determinant or consequence of the variations in poverty-area workers' incomes. We see, at least, that there is indeed an association between these two variables. If family patterns influence income levels there is support for the view that government programs providing income supports should be designed to keep male workers with their families when employment and financial problems arise. Otherwise, separation may precipitate further cycles of unemployment and money problems. Moreover, innovative strategies are needed to provide stronger family ties for workers who are too young for marriage and for older workers who are single or widowed.

If family patterns result from income differences, it indicates the social importance of a full-employment economy with higher minimum wages and income grants for those who cannot work. The emphasis should be on providing workers with opportunities for success and preventing repeated failures so that families are not broken up and children do not grow up with little hope for success.

Job-Seeking Method. Personal skills influence the level of income one receives. These personal skills may include not only the attributes for performing certain jobs, but also the ability to find out about these jobs and get hired. Our variable job-seeking method attempts to measure the effectiveness of various techniques for finding work.

In addition to the income levels associated with various job-seeking methods, this variable also measures the average income level of those who did not seek work during the past year. The findings reveal that the average incomes for the workers who did not look are above the grand mean, before and after adjustment, in all four areas. These higher income figures can be interpreted to result from the fact that most of these workers did not lose wages by being out of work during the year. (In each area some workers in this category probably were out of work part of the year, but did not look for a job during this period.)

These data, however, may also reveal another situation. Many of the workers in these poverty areas are employed in low-paying, boring, dead-end, secondary jobs. As a result, their motivation to stick with this type of employment is likely to be weak, and often they may quit their current job in order to have time to search for a better one and to have some respite from the hard work, danger, or boredom of their present job. A sufficient number of openings in these secondary jobs may be available so that if the worker decides to give up his quest for a primary job he can always go back to less desirable employment. Moreover, he may believe that, given his low pay in a secondary job, he is not losing very much income while unemployed.

Our findings do not indicate how many workers left their previous job voluntarily and how many involuntarily. Nevertheless, our results do indicate that the difference in income between those who did not look for work and for many of those who did look is sizable. Thus, this income difference at least indicates the possibility that the workers who were willing and able to stay with the same job ended up with more income by the end of the year than the workers who searched for a better-paying job. However, because these figures are averages, they may hide the fact that those who voluntarily quit their last job in order to get a better one ended up with higher incomes than those who were fired or on layoff and had to look for another job. Or those who succeeded in getting better-paying jobs may have ended up with a low annual income for the first year because of the length of time that they were unemployed. The job-seeking workers generally do not have much income saved to draw upon while they are out of work, so even a short-term loss of wages in a situation where unemployment insurance would not be available could be a major hardship. On the other hand, some of these workers' expenses, such as rent, may not be as high as they are for non-poverty area workers.

Some professionals dealing with the employment problems of low-income male workers have told us that it is difficult to keep many of these people on a low-paying job, especially if recently they have had skill training, because immediately they want something considerably better. The professionals believe that if these workers stay with the job, even though it is to some degree a secondary job, they not only accumulate more income than if they quit to job-hunt, but also they are more likely to eventually get a better job and get it with less or no temporary unemployment between jobs. In other words, by working steadily at a low-paying job, the employee may gain a number of benefits that help him to get a better position. These benefits could include a good reference from his present employer, contacts and tips about better jobs, (including better jobs at his present place of employment), learning some job skills (perhaps not from his own work, but from the work of other employees he associates with), developing good work habits (e.g., punctuality, getting along with other employees), and accumulating savings that could be used to travel to some other community for interviews or to cover moving expenses if he finally does quit to take another job.

Turning to the various job-seeking methods used by the workers in our samples who did look for employment during the previous year, we find some differences between areas in the pattern of relationship to income levels. Some of the differences may result from sampling error caused by the small number of cases in some of the categories. We do find, though, that workers using unions consistently rank in the upper income group among all four areas, while workers checking community organizations fall in the lower income group for each area. Undoubtedly, the workers in these groups rank as they do at least partly because of differences in their occupational skills.

Economic Institutions. So far we have discussed the extent to which human resource elements and social-racial discrimination determine poverty-area workers' income levels. Now we turn to the data we chose to measure the effects of occupational and industrial structure on income levels. Our data describe the workers' attachments to the economic structure in terms of general occupational, industrial, and class of worker categories. We recognize that occupation may also be a measure of workers' skills, but as part of our analysis we tried to control for education and training when considering the income effects of various occupational opportunities.

The results show that occupational attachment is one of the more important factors for determining the annual income received by workers who reside in poverty areas. Also, the impact of occupation on a worker's income level is relatively strong, independent of not only his education, experience, and job training, but also of his race, ethnicity, residential origin, health, and family structure. Occupation also has an impact that is independent of the worker's industrial attachment.

Although the incomes for the various occupational groups tend to follow the national rankings, there are differences to be noted in some of the areas. For example, in Chicago II, workers in professional and technical jobs rank fourth in income behind managers, craftsmen and foremen, and sales workers. Also, in both Chicago areas, clerical workers' incomes rank sixth, while transportation equipment operators' incomes rank fifth. Moreover, the adjusted findings in Chicago I and II suggest that for workers with equal human capital, service jobs (except private household) pay better than clerical jobs.

Of course, one problem with cross-sectional comparisons is that we do not see the occupations of those workers who moved out of the ghetto or barrio after breaking through the poverty barrier. Nevertheless, our data for the Chicago areas suggest that higher-level blue-collar jobs may offer more opportunities for higher incomes to disadvantaged workers than lower-level white-collar jobs. Unfortunately, in all four areas, the higher-level blue-collar occupations and all of the white-collar occupations generally do not pay off as well for poverty-area residents as they do for non-poverty area residents. Some young ghetto workers with high aspirations and goals may need to recognize that a white-collar job is not the only pathway out of poverty. Here again, the variations in our findings among the areas indicate the need to give attention to the unique conditions in each local area. One can see the necessity for the flexibility that the CETA program and other Department of Labor programs for special groups are suppose to give to local officials dealing with employment problems. Also, young workers might have more realistic aspirations, goals, and job-seeking methods, now that Federal programs are underway to promote more effective vocational and career exploration activities in the early years of high school, or even grade school, before the students graduate or drop-out. A problem in the ghetto environment is the lack of contact students have with employers throughout the metropolis and in other communities. An informant from the St. Louis area suggested that such things as employer visits to the school and student field trips to factories and businesses could be helpful. Also, summer intern programs could be used to give students first-hand experience in various work roles and settings and perhaps improve their opportunities in high-wage occupations.

The type of occupation to which a poverty-area worker is attached is not the only economic influence on annual income. Our data show that the type of industry in which he works also has a relatively strong impact on his wages. There are sizable income differentials between the 13 general industrial categories in our variable and after statistical controls on the other variables the income differentials still are relatively large.

Nationally, industries differ in their ability to pay adequate wages. Industries in the core economy are characterized by high productivity, high profits, intensive utilization of capital, high incidence of monopolistic elements, and a high degree of unionization. As a result, workers in these industries generally receive not only relatively high wages, but also better than average working conditions and fringe benefits (Bluestone, et al., 1973: 28-29). Working for the government also greatly reduces the probability of receiving low wages. Indeed, public administration is a high-wage industry (Bluestone, et al., 1973:101). The wages in government are set institutionally rather than from "product" market competition. Apparently the restriction of tax revenues limits the number of workers hired more than it limits the wage rates of those employed.

Industries in the peripheral sector of the economy lack almost all of the advantages normally found in core firms. They are noted for their small firm size, labor intensity, low profits, low productivity, intensive product market competition, lack of unionization, and low wages (Bluestone, et al., 1973:29-30).

According to national statistics, the "low-wage industries" include agriculture, retail trade, personal service, entertainment, and recreation. The "high-wage industries" include mining, construction, durable manufacturing, transportation, communication, utilities, and public administration.

Nondurable manufacturing, business and repair services, finance, insurance, real estate, and professional services are difficult to classify because each industry is very heterogeneous, with a large variance in wage rates. As a result, they average out between high and low wage rates. Our data show that industrial attachment generally has the same effect on male workers residing in poverty areas that it does on the rest of the male labor force. Moreover, these effects are independent of workers' occupational attachment, their race or ethnicity, and their human capital characteristics. San Antonio has a few major exceptions to the general pattern: workers in construction and durable goods manufacturing average lower than expected, while those in finance, insurance, and real estate rank higher than expected.

The unadjusted data show that government jobs are by far the highest income category in all four poverty areas. Even after adjustment, public administration ranks first in St. Louis and San Antonio, second in Chicago II and third in Chicago I. With the large proportion of minority group workers in these areas, relatively less discrimination by government organizations compared with private industries may contribute to the high incomes of workers in public administration.

The class of worker variable in our study has a more inclusive "government" category than the category "public administration" in our industry variable. Our findings on class of worker again show employees in government jobs earning more than employees in private jobs. However, in the two Chicago areas the self-employed workers have the highest incomes and in San Antonio they rank second to government. We do not know from our data what types of jobs are represented by the self-employed workers in our samples. We wonder how many of them are associated with what Ferman (1969) calls the "irregular economy."

Bluestone, Murphy, and Stevenson (1973:30-31) include the irregular economy along with the central or core economy and the peripheral economy in their tripartate schema for describing labor market fragmentation. The "industries" in the irregular economy are concentrated mainly in the ghetto or barrio and are only loosely connected with the organized network of the regular economy. They report that:

> . . . the irregular economy provides the ghetto with a pattern of economic life that is largely nonconventional in its learning and opportunity structures. The ghetto is a market place for a wide range of occupational skills that do not fit neatly into the occupational skill categories and criteria operative within the conventional labor market. The nonunion or nonlicensed craftsman, the home appliance repairman, the "Mr. Fixit," the street or door-to-door hustler, all fall within the irregular ghetto economy. In addition, illegal activities--dope peddling, prostitution, gambling, etc.--are part of this economic sector. (Bluestone, et al. 1973:30)

The authors believe that many ghetto residents choose to work in this sector of the economy rather than in the peripheral economy, their only alternative. They choose the former over the latter because it offers a higher income, better working conditions, and a sense of independence. The percentages of workers classified in our samples as self-employed are small (4.5 percent in St. Louis, 6.1 percent in San Antonio, 2.8 percent in Chicago I and 3.3 percent in Chicago II) though the absolute sizes are large enough to provide reliable estimates. Probably a number of people in the irregular economy are also categorized as private workers in our study and have incomes well below the grand mean. (In St. Louis the self-employed workers fall farther below the grand mean than do private workers.)

Overall, our findings on economic structure support the view that differences in the characteristics of industries and of occupations can explain substantial differences in the income levels of poverty-area workers of similar background and skill. In other words, two workers, both with generally the same complement of human capital but employed in different occupations and industries may earn considerably different wages. Furthermore, workers of different quality may earn approximately the same wages and a more qualified individual may earn less because of differences in their industrial and occupational attachments. It is assumed that these differences result because of institutional barriers to labor mobility.

On the other hand, our data on the rest of the predictors in the study indicate that differences in labor characteristics and quality can also account for a significant degree of income inequality. For example, a prime-age, married worker in good health, with a college education and job-training is likely to earn considerably more than a worker in the same general occupation and industry who is young, single, in poor health, a high school drop-out and lacks job-training.

Along with our discussion about general socioeconomic processes affecting income levels in all of the areas, we have also given some attention to conditions that differ between areas. In some areas we find that certain socioeconomic variables do not relate to income according to the pattern that was expected. Also, in some areas some of the weaker determinants for the entire sample of workers still have a major influence on certain subgroups within the sample. Indeed, our AID analysis suggests that in all of the areas many of the stronger predictors do not have uniform effects throughout the sample. Their impact is altered by their interaction with other socioeconcmic characteristics. Tables 23, 24, 25, and 26 show the characteristics that define the various income groups in each area according to the AID findings. These worker groups are shown in rank order according to average income level, starting with the highest group.

Table 23. Annual Income of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
13	$7,284	$2,416	287	Age: 25-64. Job-Seeking Method: did not look; state employment agency. Occupation: professional & technical; managerial & admin.; craftsmen & foremen; clerical. Class of Worker: government; private.
11	7,034	2,541	92	Age: 25-64. Job-Seeking Method: did not look; state employment agency. Occupation: sales; operatives (except trans.); laborers (except farm); trans. equipment operatives; service workers. Relation to Head: head with other relations in household. Education: 12 or more years of school.
15	6,039	2,387	236	Age: 25-64. Job-Seeking Method: did not look; state employment agency. Occupation: sales; operatives (except trans.); laborers (except farm); trans. equipment operatives; service workers. Relation to Head: head with other relations in household. Education: less than 12 years of school. Industry: construction; public administration; finance, insurance, & real estate; trans., comm., & utilities; mfg. durable goods; mfg. non-durable goods.
19	5,712	2,437	41	Age: 16-24. Where Lived at Age 16: country; farm; small city; large city.
23	5,380	2,568	92	Age: 25-64. Job-Seeking Method: did not look; state employment agency. Occupation: sales; operatives (except trans.); laborers (except farm); trans. equipment operatives; service workers. Relation to Head: head without relations in household; non-relative of head without relations in household; other relative of head. Industry: business & repair services; construction; mfg. durable goods; mfg. non-durable goods; trans., comm., & utilities; public administration; personal services.

Table 23. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
12	$5,271	$2,946	27	Age: 25-64. Job-Seeking Method: did not look; state employment agency. Occupation: professional & technical; managerial & admin., craftsmen & foremen; clerical. Class of Worker: self-employed.
14	5,061	2,425	99	Age: 25-64. Job-Seeking Method: did not look; state employment agency. Occupation: sales; operatives (except trans.); laborers (except farm); trans. equipment operatives; service workers. Relation to Head: head with other relations in household. Education: less than 12 years of school. Industry: wholesale & retail trade; personal services; professional; entertainment & recreation; business & repair services; agri., forestry, & fisheries.
17	5,028	2,641	126	Age: 25-64. Job-Seeking Method: no answer; union; other; ask friends & relatives; community organization; directly to employer; newspapers; private employment agency. Industry: public administration; trans., comm., & utilities; construction; mfg. durable goods.
25	4,747	2,761	36	Age: 25-64. Job-Seeking Method: no answer; union; other; ask friends & relatives; community organization; directly to employer; newspapers; private employment agency. Industry: professional; mfg. non-durable goods; personal services; finance, insurance, & real estate; no answer; wholesale & retail trade; entertainment & recreation; business & repair services; agri., forestry, & fisheries. Where Lived at Age 16: large city; farm; small city.
21	4,193	2,734	62	Age: 16-24. Where Lived at Age 16: suburbs; this city; medium city; no answer. Marital Status: married (spouse present); married (spouse absent).
22	3,909	1,903	48	Age: 25-64. Job-Seeking Method: did not look; state employment agency. Occupation: sales; operatives (except trans.); laborers (except farm); trans. equip-

Table 23. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
				ment operatives; service workers. Relation to Head: head without relations in household; non-relative of head without relations in household; other relative of head. Industry: professional; entertainment & recreation; finance, insurance, & real estate; wholesale & retail trade.
24	$3,077	$2,186	71	Age: 25-64. Job-Seeking Method: no answer; union; other; ask friends & relatives; community organization; directly to employer; newspapers; private employment agency. Industry: professional; mfg. non-durable goods; personal services; finance, insurance, & real estate; no answer; wholesale & retail trade; entertainment & recreation; business & repair services; agri., forestry, & fisheries. Where Lived at Age 16: country; medium city; no answer; suburbs; this city.
20	2,096	1,730	116	Age: 16-24. Where Lived at Age 16: suburbs; this city; medium city; no answer. Marital Status: divorced or widowed; never married.
Total	$5,438	$2,865	1,333	

Table 24. Annual Income of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
17	$9,014	$1,949	43	Industry: public administration. Job-Seeking Method: did not look; other. Occupation: professional & technical; managerial & admin.
21	7,218	1,810	205	Industry: public administration. Job-Seeking Method: did not look; other. Occupation: clerical; craftsmen & foremen.
11	6,343	2,828	145	Industry: trans., comm., & utilities; finance, insurance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; professional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 25-64. Job-Seeking Method: private employment agency; did not look; union. Occupation: managerial & admin.; professional & technical; all farm workers.
20	6,023	1,711	116	Industry: public administration. Job-Seeking Method: did not look; other. Occupation: service workers; trans. equipment operatives; operatives (except trans.); laborers (except farm).
13	5,354	2,086	506	Industry: trans., comm., & utilities; finance, insurrance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; professional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 25-64. Job-Seeking Method: private employment agency; did not look; union. Occupation: clerical; craftsmen & foremen; operatives (except trans.); sales; trans. equipment operatives. Health Problem: no.

Table 24. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
19	$4,285	$2,596	121	Industry: trans., comm., & utilities; finance, insurance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; professional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 25-64. Job-Seeking Method: no answer; ask friends & relative; other; directly to employer; newspapers; state employment agency; community organization. Occupation: sales; managerial & admin.; professional & technical; craftsmen & foremen; clerical.
8	4,089	1,844	255	Industry: trans., comm., & utilities; finance, insurance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; professional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 25-64. Job-Seeking Method: private employment agency; did not look; union. Occupation: service workers; laborers (except farm).
12	3,911	2,062	59	Industry: trans., comm., & utilities; finance, insurance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; professional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 25-64. Job-Seeking Method: private employment agency; did not look; union. Occupation: clerical; craftsmen & foremen; operatives (except trans.); sales; trans. equipment operatives. Health Problem: yes.
14	3,845	2,532	33	Industry: public administration. Job-Seeking Method: directly to employer; no answer; newspapers; ask friends & relatives; community organization; state employment agency.
23	3,453	1,694	222	Industry: trans., comm., & utilities; finance, insurance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; profes-

Table 24. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
				sional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 20-24.
18	2,967	1,646	147	Industry: trans., comm., & utilities; finance, insurance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; professional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 25-64. Job-Seeking Method: no answer; ask friends & relatives; other; directly to employer; newspapers; state employment agency; community organization. Occupation: all farm workers; service workers; operatives (except trans.); trans. equipment operatives; laborers (except farm).
22	1,928	1,410	136	Industry: trans., comm., & utilities; finance, insurance, & real estate; entertainment & recreation; mfg. non-durable goods; business & repair services; professional; mfg. durable goods; wholesale & retail trade; construction; agri., forestry, & fisheries; no answer; personal services. Age: 16-19.
Total	$4,818	$2,541	1,988	

Table 25. Annual Income of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
13	$8,665	$2,073	75	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: professional & technical; craftsmen & foremen; managerial & admin.; sales. Industry: finance, insurance, & real estate; business & repair services; entertainment & recreation; trans., comm., & utilities.
17	7,838	2,615	199	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: professional & technical; craftsmen & foremen; managerial & admin.; sales. Industry: mfg. non-durable goods; professional; mfg. durable goods; construction; wholesale & retail trade; public administration; personal services. Marital Status: married (spouse present).
15	7,287	2,159	130	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: clerical; trans. equipment operatives; operatives (except trans.); service workers; laborers (except farm); all farm workers. Relation to Head: head with other relations in household; head without relations in household. Years at Present Address: 2 or more years. Education: 12 or more years of school.
16	6,456	2,572	118	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: professional & technical; craftsmen & foremen; managerial & admin.; sales. Industry: mfg. non-durable goods; professional; mfg. durable goods; construction; wholesale & retail trade; public administration; personal services. Marital Status: never married; divorced or widowed; married (spouse absent).

Table 25. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
14	$6,369	$2,134	356	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: clerical; trans. equipment operatives; operatives (except trans.); service workers; laborers (except farm); all farm workers. Relation to Head: head with other relations in household; head without relations in household. Years at Present Address: 2 or more years. Education: less than 12 years of school.
21	5,709	2,605	176	Job-Seeking Method: no answer; state employment agency; directly to employer; ask friends & relatives; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Age: 25-59. Health Problem: no.
8	5,648	2,300	220	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: clerical; trans. equipment operatives; operatives (except trans.); service workers; laborers (except farm); all farm workers. Relation to Head: head with other relations in household; head without relations in household. Years at Present Address: 1 year or less.
23	5,184	2,300	113	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: clerical; trans. equipment operatives; operatives (except trans.); service workers; laborers (except farm); all farm workers. Relation to Head: other relative of head; non-relative of head without relations in household; non-relative of head with own relations in household. Industry: public administration; construction; trans., comm., & utilities; mfg. durable goods; finance, insurance, & real estate; agri., forestry, & fisheries; wholesale & retail trade; business & repair services.

Table 25. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
20	$4,190	$2,472	41	Job-Seeking Method: no answer; state employment agency; directly to employer; ask friends & relatives; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Age: 25-59. Health Problem: yes.
18	3,983	2,364	67	Job-Seeking Method: no answer; state employment agency; directly to employer; ask friends & relatives; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Age: 16-24; 60-64.
22	3,091	2,068	40	Job-Seeking Method: union; newspapers; did not look; private employment agency. Occupation: clerical; trans. equipment operatives; operatives (except trans.); service workers; laborers (except farm); all farm workers. Relation to Head: other relative of head; non-relative of head without relations in household; non-relative of head with own relations in household. Industry: mfg. non-durable goods; personal services; professional.
10	2,870	2,011	130	Job-Seeking Method: no answer; state employment agency; directly to employer; ask friends & relatives; other; community organization. Relation to Head: other relative of head; non-relative of head without relations in household.
Total	$5,979	$2,745	1,665	

Table 26. Annual Income of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
21	$8,115	$2,453	166	Job-Seeking Method: union; did not look. Occupation: sales; craftsmen & foremen; managerial & admin. Education: 9 years or more of school. Marital Status: divorced or widowed; married (spouse present); married (spouse absent).
7	7,316	2,765	174	Job-Seeking Method: union; did not look. Occupation: clerical; trans. equipment operatives; professional & technical; operatives (except trans.); service workers; laborers (except farm). Class of Worker: self-employed; government.
13	6,711	2,750	251	Job-Seeking Method: union; did not look. Occupation: clerical; trans. equipment operatives; professional & technical; operatives (except trans.); service workers; laborers (except farm). Class of Worker: private; without pay. Age: 25-59. Industry: entertainment & recreation; mfg. durable goods; business & repair services; mfg. non-durable goods; construction; wholesale & retail trade; trans., comm., & utilities; professional. Where Lived at Age 16: large city; this city; medium city.
20	6,148	2,794	25	Job-Seeking Method: union; did not look. Occupation: sales; craftsmen & foremen; managerial & admin. Education: 9 years or more of school. Marital Status: never married.
16	6,101	2,812	64	Job-Seeking Method: union; did not look. Occupation: sales; craftsmen & foremen; managerial & admin. Education: less than 9 years of school.
12	5,706	2,595	277	Job-Seeking Method: union; did not look. Occupation: clerical; trans. equipment operatives; professional & technical; operatives (except trans.); service workers;

Table 26. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
				laborers (except farm). Class of Worker: private; without pay. Age: 25-59. Industry: entertainment & recreation; mfg. durable goods; business & repair services; mfg. non-durable goods; construction; wholesale & retail trade; trans., comm., & utilities; professional. Where Lived at Age 16: no answer; small city; farm; country; suburbs.
19	$5,610	$2,980	117	Job-Seeking Method: other; no answer; newspapers; directly to employer; private employment agency; state employment agency; community organization; ask friends & relatives. Relation to Head: head with other relations in household; head without relations in household. Occupation: professional & technical; trans. equipment operatives; laborers (except farm); sales; operatives (except trans.).
8	4,820	2,695	149	Job-Seeking Method: union; did not look. Occupation: clerical; trans. equipment operatives; professional & technical; operatives (except trans.); service workers; laborers (except farm). Class of Worker: private; without pay. Age: 16-24; 60-64.
10	4,515	2,427	50	Job-Seeking Method: union; did not look. Occupation: clerical; trans. equipment operatives; professional & technical; operatives (except trans.); service workers; laborers (except farm). Class of Worker: private; without pay. Age: 25-59. Industry: personal services; finance, insurance, & real estate; no answer; agri., forestry, & fisheries.
18	4,050	2,559	78	Job-Seeking Method: other; no answer; newspapers; directly to employer; private employment agency; state employment agency; community organization; ask friends & relatives. Relation to Head: head with other relations in household; head without relations in household. Occupation: craftsmen & foremen; managerial & admin.; service workers; clerical.

Table 26. (Continued)

Group Number	Mean Income	Standard Deviation	Number of Cases	Characteristics of Workers
14	$3,146	$2,379	94	Job-Seeking Method: other; no answer; newspapers; directly to employer; private employment agency; state employment agency; community organization; ask friends & relatives. Relation to Head: non-relative of head without relations in household; other relative of head.
Total	$5,980	$2,974	1,445	

Comparison of our MCA findings for each city suggests that the racial and ethnic balance of the local poverty area and perhaps the structural characteristics of the larger community influence the degree to which both human resources and economic institutions affect ghetto workers' income levels. In some communities upgrading skills and improving labor mobility may raise incomes higher than it will in other communities.

Unfortunately, in all of the poverty areas there is a limit to the economic opportunities available to the residents. Low-wage jobs still exist. If we increase the human capital of all disadvantaged workers there still will be poverty--some workers in the society will be left with the low-wage jobs. We may find, however, that they will be less likely to take the low-wage jobs because of their training for higher-level employment, and this could bring about some structural changes in the economy.

Chapter 5

EMPLOYMENT

Some people are poor because they are unable to work a sufficient number of hours each year. The wages received while working may be adequate, but long periods without work may prevent building up a satisfactory income. We recognize, however, that other people suffer from poverty because of a deficiency in both wages and employment level. Still other workers are poor because of low wages alone. They are employed full-time and full-year, but their wages are not high enough to meet their basic needs.

In this chapter we view employment level as an indirect measure of poverty. We assume that most poverty-area workers with above average hours of employment are better off financially than if their average hours of employment were below the grand mean. This may appear to be an obvious assumption, but recall, from our discussion in Chapter 2, that some studies (e.g., Cohen, et al., 1970:141) show a curvilinear association between increases in income and employment level. Employment may level off and then decrease as a worker's income increases because of his desire to substitute leisure activities for market work after his wages get higher. On the other hand, other studies (e.g., Hill, 1969:21-25) find employment activity higher for workers whose wage rates are higher.

Working a 40 hour week for 50 weeks sums to 2,000 hours. Many professionals, managers, and businessmen who receive high incomes work more than 2,000 hours a year. Yet, employment above this level might also reflect "moonlighting" or overtime by workers whose hourly wages are quite low. Therefore, our assumption about a positive linear correlation between employment and income levels may not be completely correct. Nevertheless, for poverty-area workers we believe that the general pattern holds, even though the correlation is not perfect.

In the following sections we are concerned about which socioeconomic characteristics are barriers to employment and which characteristics lead to higher employment levels for male poverty-area workers 16 to 64 years old. These workers were employed at least one week during the previous year. Also, we tried to exclude workers in the Armed Forces or in school from our sample.

For the MCA analysis we formulated a set of hypotheses specifying the expected pattern of relationship of each independent variable with annual hours of employment. These hypothesized patterns, shown in Table 27, are similar to the patterns that we predicted for the income variable (shown in Table 1). There are some differences to be noted in the hypotheses for occupation and industry. The predicted relationship of occupation with income has been simplified so that all of the occupational categories are combined into only two groups instead of four. However, the detailed MCA findings are presented for 11 general occupational categories. In the relationship predicted for industry with employment we made some changes that seemed appropriate according to national unemployment figures. Wages in the construction industry generally are high, but so is the unemployment rate. Therefore we moved construction to the low employment rate grouping. In contrast, wages and salaries in finance, insurance, real estate, and professional services do not always rank very high, but their unemployment rate nationally also is relatively low. Therefore we moved these categories to the high employment-rate grouping.

Table 27. Hypothesized Relationships of Socioeconomic Variables with Annual Hours Employed

Independent Variables	Hypothesized Relationships with Employment Rates
Personal Variables--Antecedent	
Race	Higher rates for white workers than for black workers
Ethnicity	Higher rates for non-Spanish-origin workers than for Spanish-origin workers
Where Lived at Age 16	Higher rates for workers from a farm, the country, or a small city; lower rates for workers from a medium city, large city, suburb, or this city
Education	Employment rate has a positive correlation with number of years of schooling completed
Job Training	Higher rates for workers with job training than for those without job training
Veteran Status	Higher rates for veterans than for non-veterans
Personal Variables--Current	
Age	Highest rate for prime-age workers (25 to 54 years); next highest for older workers (55 to 64 years); lowest rates for younger workers (16 to 24 years)
Marital Status	Highest rates for married workers with wife present; next highest for married workers with spouse absent, and for workers who are divorced or widowed; lowest rates for workers who have never married.
Relation to Head of Household	Highest rates for household heads, with other relations in household; next highest for heads, without relations in household; next highest for non-relative of head, without relations in household; lowest rates for workers classified "other relative of head." (Sample sizes of non-relatives of head with own relations in household are too small for reliable estimates.)

(continued)

Table 27. (Continued)

Independent Variables	Hypothesized Relationships with Employment Rates
Family Size	Higher rates for workers in families of moderate size (2 to 6 persons); lower rates for unrelated workers (i.e., not living with any relatives) and workers in large families (7 persons or more).
Household Size	Highest rates for workers in households with two persons; next highest for workers in households with three persons or more; lowest rates for workers who live alone
Years at Present Address	Employment rate has a positive correlation with number of years lived at present address
Labor Force Variables	
Job-Seeking Method	Higher rates for workers who did not look for work in past 12 months, or if did look who asked friends or relatives, registered with union, checked with private employment agency; lower rates for workers who applied directly to employer, checked with State Employment Service, checked with community organizations or checked newspapers
Health Problem	Higher rates for workers answering "no"
Age Problem	Higher rates for workers answering "no"
Lack Skill, Experience or Education	Higher rates for workers answering "no"
Occupation	Higher rates for professional and technical workers; managers and administrators; sales and clerical workers; and craftsmen and foremen. Lower rates for operatives, non-farm laborers, and service workers. (Private household workers and all farm workers not included in the hypothesis because of small sample sizes.)

(continued)

Table 27. (Continued)

Independent Variables	Hypothesized Relationships with Employment Rates
Industry	Higher rates for workers in Public Administration, transportation, communication, and utilities; manufacturing durables; manufacturing nondurables; finance, insurance, and real estate; professional services. Lower rates for workers in wholesale and retail trade; business and repair services; personal services; construction. (With the possible exception of San Antonio, the sample sizes of workers in agriculture, forestry, and fisheries and entertainment and recreation are too small to provide reliable estimates. The sample sizes for workers in mining are too small in all four areas. Thus, these categories are not included in the hypothesis.)
Class of Worker	Highest rates for government employees, next highest for employees of private companies or individuals; lowest rates for self-employed workers. (The category "without pay in family business" has too few cases in each of our samples to provide a reliable estimate.)

We will not describe and discuss our findings on employment as extensively as we did for our findings on income differences among poverty-area workers. It is not necessary, since many of the results are similar to those we found in the income data. Instead, we will give primary attention to those findings and ideas that supplement the information already presented.

MCA Findings

MCA Summary Statistics. The MCA Eta-squared and Beta-squared coefficients for the four poverty areas are presented in Tables 28, 29, 30 and 31. These statistics measure the relative strength of each predictor, both before and after adjusting for the other variables in the study. We ranked the predictors according to the sizes of their summary statistics in each area and then computed the average (mean) rank in the four areas for each predictor. The final ranks of the predictors are as follows:

Final Rank	Eta^2	Mean Rank		Final Rank	Beta^2	Mean Rank
1.	Job-Seeking Method	1.0		1.	Job-Seeking Method	1.0
2.	Age	2.8		2.	Health Problem	3.5
3.	Relation to Head	3.3		3.	Age	4.4
4.	Marital Status	4.8		4.	Relation to Head	4.9
5.	Health Problem	5.3		5.	Industry	5.0
6.	Industry	5.9		6.	Marital Status	5.3
7.	Years at Present Address	7.5		7.	Family Size	7.1
8.	Occupation	8.0		8.	Occupation	7.5
9.	Class of Worker	10.6	Tied	9.	Class of Worker	10.5
10.	Age Problem	11.4		10.	Education	10.5
11.	Education	11.6		11.	Household Size	11.0
12.	Family Size	12.3		12.	Where Lived at Age 16	11.4
13.	Where Lived at Age 16	13.6		13.	Years at Present Address	12.4
14.	Household Size	13.9		14.	Age Problem	14.0
15.	Veteran Status	14.1		15.	Lack, Skill, Exp., or Ed.	15.8
16.	Job Training	14.5		16.	Race	16.0
17.	Lack, Skill, Exp., or Ed.	14.9		17.	Veteran Status	16.1
18.	Race	16.8		18.	Job Training	16.6
19.	Ethnicity	18.1		19.	Ethnicity	16.9

Table 28. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	AID $Beta^2$
Race	.000	.000	.000
Ethnicity	.000	.000	.000
Where Lived at Age 16	.006	.002	.000
Education	.006	.005	.000
Job Training	.001	.000	.000
Veteran Status	.010	.000	.000
Age	.077	.020	.020
Marital Status	.049	.051	.000
Relation to Head	.055	.009	.026
Family Size	.006	.005	.000
Household Size	.011	.007	.000
Years at Present Address	.020	.007	.006
Job-Seeking Method	.270	.238	.261
Health Problem	.009	.011	.006
Age Problem	.010	.001	.000
Lack Skill, Exp., or Ed.	.004	.001	.000
Occupation	.013	.009	.009
Industry	.022	.012	.018
Class of Worker	.011	.005	.000

MCA R^2 = .342

MCA R (adj.) = .585

AID R^2 = .346

Table 29. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, San Antonio Poverty Area

Variable	MCA Eta^2	MCA Beta^2	AID Beta^2
Race	.000	.000	.000
Ethnicity	.000	.002	.000
Where Lived at Age 16	.004	.003	.000
Education	.005	.002	.000
Job Training	.001	.000	.000
Veteran Status	.011	.002	.000
Age	.099	.034	.062
Marital Status	.051	.006	.000
Relation to Head	.064	.011	.008
Family Size	.007	.017	.007
Household Size	.000	.005	.000
Years at Present Address	.008	.001	.000
Job-Seeking Method	.221	.133	.208
Health Problem	.073	.050	.052
Age Problem	.022	.005	.000
Lack Skill, Exp., or Ed.	.004	.000	.008
Occupation	.036	.011	.000
Industry	.058	.010	.040
Class of Worker	.033	.007	.000

MCA R^2 = .345

MCA R (adj.) = .587

AID R^2 = .386

Table 30. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, Chicago (Area I) Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	AID $Beta^2$
Race	.002	.002	.000
Ethnicity	.001	.000	.000
Where Lived at Age 16	.007	.004	.000
Education	.014	.004	.000
Job Training	.002	.000	.000
Veteran Status	.000	.001	.000
Age	.053	.012	.011
Marital Status	.061	.005	.000
Relation to Head	.090	.152	.047
Family Size	.025	.090	.000
Household Size	.021	.010	.000
Years at Present Address	.032	.003	.000
Job-Seeking Method	.285	.185	.273
Health Problem	.075	.035	.040
Age Problem	.012	.000	.000
Lack Skill, Exp., or Ed.	.010	.001	.000
Occupation	.029	.004	.009
Industry	.029	.018	.030
Class of Worker	.006	.001	.000

MCA R^2 = .377

MCA R (adj.) = .614

AID R^2 = .409

206

Table 31. MCA and AID Summary Statistics for 19 Predictors of Annual Hours Employed, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, Chicago (Area II) Poverty Area

Variable	MCA Eta^2	MCA Beta^2	AID Beta^2
Race	.006	.001	.000
Ethnicity	.002	.000	.000
Where Lived at Age 16	.007	.004	.000
Education	.012	.006	.012
Job Training	.012	.002	.000
Veteran Status	.003	.000	.000
Age	.064	.011	.000
Marital Status	.029	.022	.017
Relation to Head	.031	.011	.000
Family Size	.006	.004	.029
Household Size	.001	.000	.000
Years at Present Address	.013	.002	.000
Job-Seeking Method	.252	.230	.295
Health Problem	.036	.021	.011
Age Problem	.006	.002	.000
Lack Skill, Exp., or Ed.	.004	.001	.000
Occupation	.010	.006	.000
Industry	.023	.012	.039
Class of Worker	.010	.006	.000

MCA R^2 = .347

MCA R (adj.) = .589

AID R^2 = .403

It can be seen that generally predictors with larger Eta-squares also have larger Beta-squares, but there are some exceptions. Years at present address ranks 7th in the Eta-squared column, but it drops to 13th in the Beta-squared column. In contrast, family size ranks 12th in the Eta-squared column, but it reaches 7th in the Beta-squared column.

The ranking of the summary statistics for each predictor is fairly consistent among the four areas, but this is not always true. Some predictors have one coefficient that ranks quite differently from the other three coefficients. However, there are only two instances where the coefficient rankings for a predictor are more completely dispersed (the Eta-squares for veteran status and the Beta-squares for family size).

The predictors that rank high in the Eta-square and Beta-squared columns are generally the same ones that have a strong association with income, but there are some important exceptions. Health problem is a much stronger predictor of employment level than of income level. In contrast, education has considerably less impact on hours of employment than on annual income.

Excluding job-seeking method, the socioeconomic variables as a group do not show as strong a relationship with employment level as they do with income level. That is, the Eta-squared statistics for employment are not as large as the Eta-squared statistics for income when comparing predictors of the same rank. This also generally occurs after adjustment, though a few of the largest Beta-squared coefficients in the employment data, in addition to job-seeking method, are larger than the Beta-squared coefficients of identical rank in the income data.

Tables 32-47 provide all of the detailed MCA employment findings. We see that there is some variation in the average annual hours of employment in

Table 32. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

	Grand Mean = 1,765 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Race			
White	8	-2	435
Negro	-4	1	893
Other	132	44	5
Ethnicity			
Spanish origin	-64	2	17
Non-Spanish origin	1	0	1,316
Where Lived at Age 16			
This city	-25	3	663
Suburb	-124	-24	20
Large city	-7	-74	63
Medium city	43	45	52
Small city	21	9	250
Country	95	-33	39
Farm	66	9	157
No answer	-24	-15	89
Education			
7 years or less	-19	-13	253
8 years	-18	-43	236
9 to 11 years	-37	2	383
12 years	51	46	304
13 years or more	51	-1	155
Job Training			
Yes	-28	5	377
No	11	-2	956
Veteran Status			
Veteran	52	-1	609
Non-Veteran	-44	1	724

Table 33. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

	Grand Mean = 1,830 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Race			
White	-1	0	1,747
Negro	7	-4	238
Other	210	126	3
Ethnicity			
Spanish origin	0	9	1,549
Non-Spanish origin	1	-32	439
Where Lived at Age 16			
This city	-12	-1	1,177
Suburb	172	149	17
Large city	-23	-39	80
Medium city	8	-10	105
Small city	11	-11	416
Country	26	-53	17
Farm	78	68	98
No answer	-9	8	78
Education			
7 years or less	-32	-24	716
8 years	-3	-15	191
9 to 11 years	0	17	405
12 years	18	28	464
13 years or more	69	1	204
Job Training			
Yes	18	-2	639
No	-8	1	1,349
Veteran Status			
Veteran	57	-22	814
Non-Veteran	-40	15	1,174

Table 34. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area 1) Poverty Area (1,665 Workers)

Characteristic	Grand Mean = 1,797 Hours: Deviation from Grand Mean (Hours)	Grand Mean = 1,797 Hours: Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Race			
White	11	-12	971
Negro	-26	10	625
Other	75	80	69
Ethnicity			
Spanish origin	27	-1	406
Non-Spanish origin	-9	0	1,259
Where Lived at Age 16			
This city	-26	-18	547
Suburb	63	44	30
Large city	-44	-25	197
Medium city	12	25	109
Small city	60	34	476
Country	-54	-88	43
Farm	-21	-19	149
No answer	-32	10	114
Education			
7 years or less	-38	-44	313
8 years	49	20	293
9 to 11 years	-65	-22	462
12 years	35	34	367
13 years or more	68	24	229
Job Training			
Yes	-36	-18	380
No	11	5	1,285
Veteran Status			
Veteran	16	-17	518
Non-Veteran	-7	8	1,147

Table 35. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

Characteristic	Grand Mean ≈ 1,823 Hours		Number of Cases
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	
Race			
White	69	20	212
Negro	-16	-5	1,200
Other	119	68	33
Ethnicity			
Spanish origin	89	32	71
Non-Spanish origin	-5	-2	1,374
Where Lived at Age 16			
This city	-20	-8	574
Suburb	86	-68	15
Large city	-90	-61	96
Medium city	-4	31	117
Small city	47	22	294
Country	91	32	33
Farm	-9	-32	187
No answer	31	49	129
Education			
7 years or less	-15	-10	209
8 years	22	-17	209
9 to 11 years	-71	-37	442
12 years	50	53	381
13 years or more	50	9	202
Job Training			
Yes	-93	-43	318
No	26	12	1,127
Veteran Status			
Veteran	30	-8	598
Non-Veteran	-21	5	847

Table 36. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

	Grand Mean = 1,765 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Age			
16 to 19 years	-474	-230	87
20 to 24 years	-84	42	132
25 to 34 years	23	34	284
35 to 44 years	40	36	297
45 to 54 years	104	25	276
55 to 59 years	9	-29	132
60 to 64 years	32	-69	125
Marital Status			
Married, spouse present	76	82	857
Married, spouse absent	-111	-126	127
Divorced or widowed	-37	-141	107
Never married	-193	-161	242
Relation to Head			
Head with other relations in household	65	-24	901
Head without relations in household	-1	119	164
Non-relative of head, with own relations in household	-405	41	2
Non-relative of head, without relations in household	-115	16	42
Other relative of head	-237	8	224
Family Size			
1 person	-24	51	206
2 persons	49	-28	282
3 persons	-9	-5	231
4 persons	14	14	176
5 persons	31	24	103
6 persons	-81	-80	122
7 persons or more	-13	16	213

Table 37. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = 1,830 Hours		Number of Cases
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	
Age			
16 to 19 years	-448	-254	146
20 to 24 years	-84	-19	244
25 to 34 years	75	70	405
35 to 44 years	80	32	415
45 to 54 years	56	27	458
55 to 59 years	28	-8	177
60 to 64 years	-57	-78	143
Marital Status			
Married, spouse present	58	21	1,424
Married, spouse absent	-111	-79	99
Divorced or widowed	-24	-29	104
Never married	-192	-52	361
Relation to Head			
Head with other relations in household	63	-3	1,436
Head without relations in household	-25	160	123
Non-relative of head, with own relations in household	210	460	1
Non-relative of head, without relations in household	-118	6	44
Other relative of head	-216	-43	384
Family Size			
1 person	-48	-157	168
2 persons	-9	-49	309
3 persons	56	69	321
4 persons	23	13	299
5 persons	15	32	289
6 persons	13	12	200
7 persons or more	-53	10	402

Table 38. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area 1) Poverty Area (1,665 Workers)

	Grand Mean = 1,797 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Age			
16 to 19 years	-434	-214	77
20 to 24 years	-108	-30	229
25 to 34 years	48	23	450
35 to 44 years	30	10	346
45 to 54 years	61	37	365
55 to 59 years	75	14	128
60 to 64 years	-85	-83	70
Marital Status			
Married, spouse present	100	25	978
Married, spouse absent	-136	-84	167
Divorced or widowed	-98	-53	107
Never married	-158	-12	413
Relation to Head			
Head with other relations in household	99	-72	1,048
Head without relations in household	-51	379	277
Non-relative of head, with own relations in household	126	104	7
Non-relative of head, without relations in household	-339	185	108
Other relative of head	-234	-221	225
Family Size			
1 person	-133	-260	386
2 persons	56	125	289
3 persons	53	99	266
4 persons	59	61	242
5 persons	66	67	176
6 persons	-7	8	114
7 persons or more	-20	55	192

Table 39. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

Characteristic	Grand Mean = 1,823 Hours Deviation from Grand Mean (Hours)	 Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Age			
16 to 19 years	-542	-206	49
20 to 24 years	-136	-70	153
25 to 34 years	12	26	313
35 to 44 years	22	11	298
45 to 54 years	68	23	377
55 to 59 years	73	29	141
60 to 64 years	8	-32	114
Marital Status			
Married, spouse present	58	53	882
Married, spouse absent	-34	-46	182
Divorced or widowed	-53	-109	111
Never married	-145	-98	270
Relation to Head			
Head with other relations in household	49	-27	920
Head without relations in household	-13	91	230
Non-relative of head, with own relations in household	217	-41	4
Non-relative of head, without relations in household	-67	94	86
Other relative of head	-184	-20	205
Family Size			
1 person	-28	-24	316
2 persons	4	-18	298
3 persons	70	50	240
4 persons	-1	-18	174
5 persons	7	27	150
6 persons	-58	-43	99
7 persons or more	-27	26	168

Table 40. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

Characteristic	Grand Mean = 1,765 Hours Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	-8	-37	153
2 persons	58	41	306
3 persons or more	-14	-3	865
Years at Present Address			
1 year or less	-94	-35	419
2 to 5 years	13	-3	387
6 to 10 years	32	-21	230
11 to 20 years	97	77	225
21 years or more	68	49	72
Job-Seeking Method			
State employment service	-531	-434	25
Directly to employer	-448	-436	83
Asked friends or relatives	-478	-437	59
Newspapers	-403	-462	8
Union	-234	-259	11
Private employment agency	-659	-672	9
Community organizations	-245	-135	9
All other methods	-565	-547	19
Did not look in past 12 months	146	137	989
No answer	-340	-317	121
Health Problem			
Yes	-160	-183	97
No	13	14	1,236
Age Problem			
Yes	-235	-67	54
No	10	3	1,279
Lack Skill, Experience or Education			
Yes	-57	32	273
No	15	-8	1,060

Table 41. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = 1,830 Hours Deviation from Grand Mean (Hours)	Grand Mean = 1,830 Hours Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	8	65	121
2 persons	-12	57	328
3 persons or more	2	-17	1,533
Years at Present Address			
1 year or less	-55	-1	516
2 to 5 years	12	-22	448
6 to 10 years	54	20	330
11 to 20 years	-13	-2	450
21 years or more	46	20	244
Job-Seeking Method			
State employment service	-505	-360	32
Directly to employer	-344	-275	197
Asked friends or relatives	-318	-218	140
Newspapers	-335	-300	30
Union	-200	-252	9
Private employment agency	137	149	6
Community organizations	-758	-661	12
All other methods	-481	-400	32
Did not look in past 12 months	114	87	1,492
No answer	-165	-56	38
Health Problem			
Yes	-337	-279	218
No	42	34	1,770
Age Problem			
Yes	-302	-140	91
No	14	7	1,897
Lack Skill, Experience or Education			
Yes	-43	8	546
No	16	-3	1,442

Table 42. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

	Grand Mean = 1,797 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	-146	-97	295
2 persons	43	-21	324
3 persons or more	30	35	1,041
Years at Present Address			
1 year or less	-105	-24	640
2 to 5 years	64	6	509
6 to 10 years	16	2	261
11 to 20 years	103	38	181
21 years or more	158	68	74
Job-Seeking Method			
State employment service	-591	-508	7
Directly to employer	-433	-379	146
Asked friends or relatives	-377	-302	90
Newspapers	-48	-38	16
Union	-228	-234	4
Private employment agency	-246	-146	13
Community organizations	-830	-577	17
All other methods	-589	-327	20
Did not look in past 12 months	152	123	1,218
No answer	-401	-333	134
Health Problem			
Yes	-448	-307	135
No	40	27	1,530
Age Problem			
Yes	-243	-28	81
No	12	1	1,584
Lack Skill, Experience or Education			
Yes	-96	24	341
No	25	-6	1,324

Table 43. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

Characteristic	Grand Mean = 1,823 Hours: Deviation from Grand Mean (Hours)	Grand Mean = 1,823 Hours: Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	-18	8	209
2 persons	-11	6	323
3 persons or more	8	-4	908
Years at Present Address			
1 year or less	-57	-1	408
2 to 5 years	-26	-24	465
6 to 10 years	60	28	267
11 to 20 years	46	4	224
21 years or more	110	41	81
Job-Seeking Method			
State employment service	-449	-341	11
Directly to employer	-553	-468	75
Asked friends or relatives	-414	-327	59
Newspapers	-530	-553	12
Union	-547	-561	12
Private employment agency	137	361	4
Community organizations	-930	-918	3
All other methods	-773	-715	4
Did not look in past 12 months	126	110	1,144
No answer	-452	-412	121
Health Problem			
Yes	-307	-237	111
No	26	20	1,334
Age Problem			
Yes	-228	-116	36
No	6	3	1,409
Lack Skill, Experience or Education			
Yes	-57	32	273
No	13	-8	1,172

Table 44. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

Characteristic	Grand Mean = 1,765 Hours		Number of Cases
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	
Occupation			
Professional and technical	19	52	71
Managerial and administrative	144	75	44
Sales	89	-18	24
Clerical	84	15	124
Craftsmen and foremen	-4	16	224
Operatives, except transportation	21	14	315
Transport equipment operatives	4	-50	131
Laborers, except farm	-103	-51	162
Service, except private household	-42	-17	233
Private household workers	-82	124	2
All farm workers	128	699	3
Industry			
Agriculture, forestry and fisheries	-105	-260	8
Mining	275	228	1
Construction	-192	-111	79
Durable goods manufacturing	13	-4	369
Nondurable goods manufacturing	83	68	184
Transportation, communication and utilities	-4	-26	148
Wholesale and retail trade	-12	21	200
Finance, insurance and real estate	-110	22	34
Business and repair services	-99	-76	56
Personal services	-13	-46	35
Entertainment and recreation	-12	152	8
Professional services	2	36	127
Public administration	121	1	80
Class of Worker			
Private	-7	6	1,090
Government	97	1	178
Self-employed	-128	-124	60
Without pay in family business	-439	-376	1

Table 45. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = 1,830 Hours Deviation from Grand Mean (Hours)	 Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Occupation			
Professional and technical	57	19	120
Managerial and administrative	115	84	122
Sales	54	82	51
Clerical	87	-4	190
Craftsmen and foremen	32	24	500
Operatives, except transportation	-16	1	272
Transport equipment operatives	21	-24	190
Laborers, except farm	-145	-60	247
Service, except private household	-41	-13	274
Private household workers	210	614	1
All farm workers	-430	-268	21
Industry			
Agriculture, forestry and fisheries	-370	32	29
Mining	-230	-281	4
Construction	-146	-72	239
Durable goods manufacturing	-41	-43	149
Nondurable goods manufacturing	16	25	149
Transportation, communication and utilities	88	41	121
Wholesale and retail trade	-35	-5	444
Finance, insurance and real estate	49	20	48
Business and repair services	28	40	117
Personal services	-104	-20	100
Entertainment and recreation	-37	73	20
Professional services	28	17	163
Public administration	146	30	397
Class of Worker			
Private	-47	-10	1,292
Government	122	39	563
Self-employed	-42	-99	122
Without pay in family business	-274	335	3

Table 46. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area 1) Poverty Area (1,665 Workers)

Characteristic	Grand Mean = 1,797 Hours		Number of Cases
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	
Occupation			
Professional and technical	65	7	101
Managerial and administrative	109	55	68
Sales	100	-4	21
Clerical	18	8	173
Craftsmen and foremen	75	52	285
Operatives, except transportation	7	-17	514
Transport equipment operatives	50	-20	122
Laborers, except farm	-153	-53	169
Service, except private household	-101	0	203
Private household workers	-345	-166	3
All farm workers	-551	-24	6
Industry			
Agriculture, forestry and fisheries	-390	-73	10
Mining	242	564	1
Construction	-160	-158	80
Durable goods manufacturing	53	44	556
Nondurable goods manufacturing	23	-11	227
Transportation, communication and utilities	54	48	156
Wholesale and retail trade	17	-8	249
Finance, insurance and real estate	21	44	48
Business and repair services	-149	-122	89
Personal services	-205	-100	54
Entertainment and recreation	-202	-193	7
Professional services	-42	4	131
Public administration	7	26	56
Class of Worker			
Private	-3	0	1,489
Government	19	3	128
Self-employed	100	-2	46
Without pay in family business	-998	624	1

Table 47. Relationship Between Annual Hours Employed and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

	Grand Mean = 1,823 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Occupation			
Professional and technical	-20	-39	79
Managerial and administrative	91	60	51
Sales	-37	-32	20
Clerical	38	-21	162
Craftsmen and foremen	24	31	227
Operatives, except transportation	-5	-2	311
Transport equipment operatives	43	43	153
Laborers, except farm	-99	-41	187
Service, except private household	-3	-9	253
Private household workers	217	509	2
All farm workers	--	--	--
Industry			
Agriculture, forestry and fisheries	217	118	3
Mining	217	-72	1
Construction	-166	-125	112
Durable goods manufacturing	-17	11	299
Nondurable goods manufacturing	51	17	221
Transportation, communication and utilities	24	14	175
Wholesale and retail trade	-34	-10	243
Finance, insurance and real estate	66	51	42
Business and repair services	-2	32	59
Personal services	-43	-75	57
Entertainment and recreation	-255	-315	5
Professional services	24	8	115
Public administration	140	81	105
Class of Worker			
Private	-13	3	1,179
Government	99	11	208
Self-employed	-114	-162	48
Without pay in family business	217	33	2

each poverty area. The grand mean for San Antonio is highest (1,830 hours), followed by Chicago II (1,823 hours), Chicago I (1,797 hours) and St. Louis (1,765 hours). The standard deviations are 438 hours (San Antonio), 462 hours (Chicago II), 486 hours (Chicago I), and 485 hours (St. Louis). Table 48 summarizes how well the unadjusted and adjusted relationships between the predictors and employment follow the patterns that were hypothesized.

Discussion of MCA Findings

The data show evidence that racial and ethnic differences between workers residing in the same poverty area are not major determinants of the employment variations found within each sample. Chicago II is the only area where the unadjusted deviations from the grand mean show some size. White workers average 75 hours per year more than black workers and Spanish-origin workers average 94 hours more per year than non Spanish-origin workers (most of whom are black). After adjustment, however, the differences drop to 25 hours and 34 hours respectively. The independent effect of these variables is negligible in all of the areas. Thus, the findings suggest that white, non-Spanish workers who live in urban poverty areas do not have an employment advantage over their black or Spanish neighbors as do non-minority workers in the rest of the metropolis.

The relationship of residential origin (where lived at age 16) with employment performance is more consistent among the areas than the relationship with income achievement. This predictor follows or partially follows the hypothesized pattern in all four areas before adjustment and in three areas after adjustment, but the differences between most of the categories are not very large. Nevertheless, there is some evidence that workers from the local

Table 48. Summary of Relationships Between Socioeconomic Variables and Annual Hours Employed that Follow (F), Partially Follow (P), and do not Follow (N), Patterns Hypothesized

	Unadjusted Findings				Adjusted Findings			
	SL	SA	Ch. I	Ch. II	SL	SA	Ch. I	Ch. II
Antecedent Personal Variables								
Race	F	N	F	F	N	F	N	F
Ethnicity	F	N	N	N	N	N	N	N
Where Lived at Age 16	P	F	P	P	P	P	N	P
Education	P	F	P	P	P	P	P	P
Job Training	N	F	N	N	F	N	N	N
Veteran Status	F	F	F	F	N	N	N	N
Current Personal Variables								
Age	P	F	P	P	P	F	P	P
Marital Status	F	F	F	F	F	P	P	P
Relation to Head	F	F	P	F	P	P	P	N
Family Size	P	F	F	P	N	P	P	N
Household Size	P	N	F	P	F	N	P	N
Years at Present Address	P	P	P	P	P	N	P	P
Labor Force Variables								
Job-Seeking Method	P	F	P	P	P	F	P	P
Health Problem	F	F	F	F	F	F	F	F
Age Problem	F	F	F	F	F	F	F	F
Lack Skill, Experience or Education	F	F	F	F	N	N	N	N
Occupation	P	F	P	P	P	P	P	P
Industry	P	P	P	P	P	P	P	P
Class of Worker	F	P	N	F	P	F	F	F

city or other large cities work fewer hours than migrants from smaller cities or rural areas. There should be further investigation of the hypothesis that rural migrants to poverty areas are willing to take jobs found unacceptable by urban-reared workers, who prefer to accept welfare over low-status, low-wage jobs.

As hypothesized, veterans show higher employment levels than non-veterans, and in St. Louis and San Antonio the differences are moderately strong. After adjustment the differences in all of the areas disappear or the patterns become reversed. As in the income findings, this measure is strongly intercorrelated with some other predictors in the study.

Educational level tends to have a positive association with employment level, but, as noted earlier, the relationship is considerably weaker than the relationship of education with income level. In three areas we find that high school drop-outs have the lowest employment levels of any educational group and in two areas high school drop-outs continue to show low employment in the adjusted figures. Thus, often the high school drop-out suffers from poor performance in the labor market as much as the grade school drop-out. Perhaps failure to complete a school program, whether grade school or high school, is associated with failure to work a sufficient number of hours. Are people who drop out of school more likely to drop out of work?

Lack of skill, education, or experience follows the hypothesized pattern but apparently it is not a very good measure of these problems. The employment differences between workers who answered yes and those who answered no are not very large, and after adjustment the differences are modest to trifling.

In three of the four poverty areas the results for job-training are opposite to the predicted pattern. The findings show workers with job training employed fewer hours than those without job training. However, the differences in employment rates are quite small in all areas except Chicago II, and after adjustment they appear to be insignificant in all areas. Nevertheless, one wonders if the reversal of the hypothesized pattern is not simply sampling error. Perhaps it reflects employment time lost during training for some of the workers, or perhaps it occurs because some workers having employment problems are more likely to take job-training programs.

The summary statistics reveal that age is one of the strongest predictors of employment level, though its relationship to income is even stronger. Age generally relates to employment level according to the pattern hypothesized. Young employees 16 to 19 years work the fewest hours and prime-age employees work the most hours per year. However, in the older ages the employment levels do not taper off as soon as was predicted. Workers 55 to 59 years old in two areas (Chicago I and Chicago II) and 60 to 64 years old in another area (St. Louis) are employed as many hours as workers in some of the middle-year age groups. Even after controlling on the other variables in the analysis we still see the high employment levels extending through age 59 in the two Chicago areas.

The relatively few workers who said that employers think that they are too old or too young to be hired show large deficits in their hours of employment. These poverty-area workers certainly need help in raising their employment levels to parity, but they do not constitute a major portion of the workers suffering from employment deficiencies in each sample.

The number who said that health hinders their employment success is somewhat larger than the number who said yes to the age-problem question. Workers in poor health generally experience sizable losses in employment hours. The most serious set-back is in Chicago I, where workers with a health problem average 488 fewer hours per year than workers without a health problem. This is one of the strongest determinants of employment differences among poverty-area workers and the MCA analysis indicates that the effect is fairly independent of the other forces measured in our study.

There is the possibility, however, that for some of these workers health problems are a result rather than a cause of inadequate employment and income. The psychological and physiological hardships imposed on workers who lose jobs and income certainly can lead to poor health. Then causation may reverse: workers in poor health may be unable to successfully search for and hold on to satisfactory jobs.

Our variables pertaining to family and locational ties include marital status, relation to head, family size, household size, and years at present address. Our measure of age may also reflect to some extent the stages in the family life-cycle. The findings reveal that in most cases these variables follow or partially follow the patterns of relationship that were predicted. After adjustment is when most of the exceptions to the hypothesized patterns occur. Some of these variables measure quite similar concepts (marital status and relation to head; family size and household size). Therefore, the intercorrelations between these variables may cause some of the patterns to be altered after adjustment.

Household status (relation to head) and marital status are among the strongest predictors of employment level in the study. Years at present address has a relatively strong relationship to hours of employment, but it becomes weaker after controlling the other variables. In contrast, family size is relatively weak before adjustment, but after adjustment shows a relatively strong independent impact on employment level. Household size is not a very consistent or strong predictor. Family size emerges as a better measure of the influence of number of people in the home.

Earlier in this report we discussed how employment might be an intervening variable between family structure and income level. The findings in this chapter provide some direct evidence that differences in family life-style are associated with differences in hours of employment. Our employment data suggest that poverty-area workers with weak or excessive family responsibilities or unstable family and locational ties are more likely to work fewer hours per year. The causal direction of the relationship, however, is still unanswered. We hypothesized that weak family ties cause low employment and poverty, but as we indicated in Chapter 4, some writers believe the reverse to be true. Chilman (1975:57-58) on the basis of her own and other's research, argues that poverty is a leading cause of family instability:

> Lack of income is related to high rates of unemployment and underemployment, adverse living conditions in deteriorated neighborhoods, poor health, lack of community resources: all of these factors tend to undermine the stability of family life.
>
> These poverty conditions contribute to such attitudes and behaviors as fatalism, alienation, distrust between family members, separate male and female worlds, little communication between mates and between parents and children, and punitive and authoritative methods of child rearing. . . . Attitudes and behaviors of these kinds growing out of long-term, severe poverty, tend to further the problems of poor families, adversely affecting family relationships and developmental outcomes for both parents and children--especially the latter.

Chilman (1975:58) does, however, qualify her position by suggesting that poverty as a leading cause of family breakdown is most likely to apply to those families that have been suffering from extreme poverty for a long period of time, often for several generations. She believes that there are many different levels of poverty, and that some groups of families become poor partly because of changes in family structure and size.

According to the authors of a five-year study of over 5,000 lower-income families (Morgan, et al., 1974) changes in family size and structure are leading causes of poverty.

Even when family changes cause poverty not all of them have to do with the male's work behavior and differences in his hours of employment. For example, a family in which both husband and wife work may fall below the poverty line when the wife dies. Another family may be forced into poverty because of an increase in the number of children. In a third family, divorce may force the parents and children into poverty because of the expense of supporting separate households. The primary cause of the divorce may be other than economic.

In all of these cases the male workers may have a positive attitude and good work habits. In fact, he may work even longer and harder because of his family problems. Yet he is in poverty because his income still is insufficient to cover basic expenses.

Job-seeking method is the strongest variable in every area, both before and after adjustment. Of course, the employment variation between workers in the "did not look" category and all of those in the job-seeking categories is a major reason for this predictor's strength. It is interesting to find that approximately eight out of ten poverty-area workers did not look for work in the previous year. There are also sizable differences in the employment levels of workers who used the different job-seeking methods, though in some of the categories there are small samples.

The levels of employment success by workers who used the various job-seeking methods shows some tendency to fit our crude predictions, but in only one area (San Antonio) was our hypothesis completely supported. Workers who asked friends or relatives for job leads have higher employment levels in only two of the four areas. Workers who registered with a union rank higher in three of the areas and so do workers who used a private employment agency. Workers who went directly to the employer to get a job consistently fall in the lower employment group, but never rank lowest. In two areas, using newspapers is associated with higher employment levels than we predicted, and in the other two areas the workers using this method rank highest in the lower employment grouping. In three out of four areas the workers who used the State Employment Service or community organizations have quite low levels of employment. After adjustment the general patterns of relationship do not change very much. We have controlled on education, job training, occupation and industry. However, our operational definitions of these variables use broad categories. Consequently, some of the association of employment level with job-seeking methods may still reflect differences in the occupational attachment and skills of the workers rather than the effectiveness of the technique.

Our measures of economic structure--occupation, industry, and class of worker--show some support for the hypotheses that we proposed, but their impact on employment level is less than their impact on income. The occupational data reveal that attachment to white-collar or craftsmen and foremen positions generally is associated with higher employment levels, while attachment to any of the other blue-collar jobs is associated with fewer hours of employment. Laborers and service workers usually rank lowest and operatives tend to rank second lowest. Managers and administrators always rank highest, but workers in other higher-employment categories do not show a consistent ranking in all four areas. For example, professional and clerical workers rank third in San Antonio, but seventh in Chicago II. After adjustment, the general patterns stay essentially the same. Thus, for occupational groups in poverty areas, hours of employment cannot be predicted as accurately as their income levels.

Industrial attachment generally follows the crude hypotheses we formulated. Public administration workers have the highest employment levels in three of the four areas, while construction workers have the lowest employment levels in three of the four areas. The other industrial categories fluctuate in ranking, but generally fall into the higher or lower employment group as predicted, both before and after adjustment.

Class of worker is an inconsistent predictor before adjustment, but in three of the four areas government workers have the highest employment levels. After adjustment the employment differences are as hypothesized in three areas: government workers highest, private workers next highest, and self-employed workers lowest, and partially as hypothesized in St. Louis. However, the employment differences in Chicago I are insignificant.

In sum, the findings for our three measures of economic structure suggest that the occupation and industry to which a worker becomes attached has some influence on the number of hours he will work during a year. This influence generally is greater than the impact of some human capital, racial, and cultural background factors, as measured by our antecedent personal variables. Of equal or even stronger impact than economic structure are the social-biological forces of age and health. However, some of the correlation of health with employment level may reflect the impact of the latter on the former. Family structure also has a relatively strong association with hours of employment, but for some workers family life may be affected by employment level rather than vice-versa. It is no surprise to find, of course, that workers who did not seek jobs during the year have high levels of employment, but we also find that different methods of job-seeking are associated with differences in level of employment.

AID Findings

To look for important patterns of relationship in our data that might not be uncovered by the MCA program, we carried out a second analysis using the Automatic Interaction Detector (AID) computer program. The AID summary statistics for the four poverty areas are presented in Tables 28, 29, 30 and 31. The AID Beta-squared statistics presented in these tables measure the proportion of the total employment variation explained by each of the variables in the study. Thus, the AID coefficients sum to AID R-squared (shown on the bottom of each table).

When comparing the AID Beta-squared figures with the corresponding MCA Beta-squared and Eta-squared figures in the same tables we find that most of the strong predictors according to the MCA program also are strong according to the AID program. One exception is marital status, which appears only in the AID model for Chicago II. Marital status may not appear in the AID models for the other areas because of its intercorrelation with relation to head. In other words, the effects are not sufficiently independent for both variables to appear in the same AID model. We find that in the one area where marital status appears, relation to head is not included (nor is age included).

Occupation appears in only two areas. Perhaps this is because of competition from the industry predictor to explain the same variation.

The employment subgroups generated by the AID splits for each area are shown in Figures 5, 6, 7, and 8. Years at present address appears in the AID model for the one city (St. Louis, Figure 5) where it has a relatively strong relationship, both before and after adjustment, in the MCA findings. Family size appears in the AID models, but its patterns of relationship to employment are not meaningful. According to the MCA, education is a relatively weak predictor in three of the areas, but is somewhat stronger in Chicago II. The AID findings also show education having some strength in that area (Figure 8) for certain subgroups. Specifically, education affects the employment level of workers who sought jobs and are married, divorced, or widowed.

Lack skill, experience, or education is a weak predictor in all of the areas according to the MCA results, but it has some extra influence on certain workers in the San Antonio sample according to the AID analysis (Figure 6). This measure affects the employment level of household heads or non-relatives of heads with own relations in households, ages 20-54, in good health, currently or last employed in higher-paying industries, and who sought work during the previous year. Those who said that they do not lack skill, experience, or education averaged 1,916 hours; those who said that they do lack one or more of these characteristics averaged only 1,605 hours.

Tables 49, 50, 51 and 52 show the socioeconomic characteristics that define the various employment groups in each area according to the AID findings. These groups are ranked according to their average hours of employment, starting with the highest average.

Figure 5. Annual Hours Employed, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

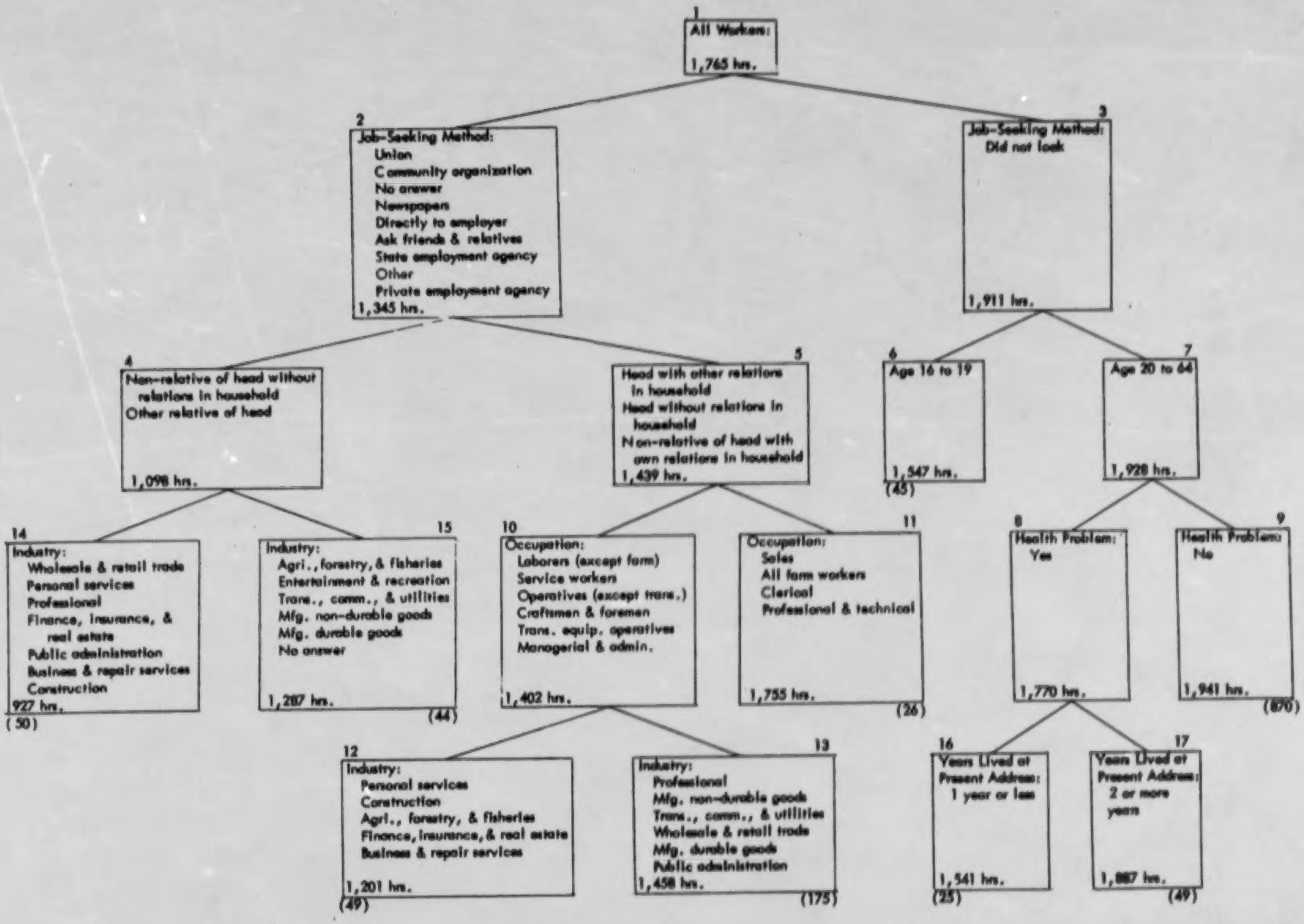
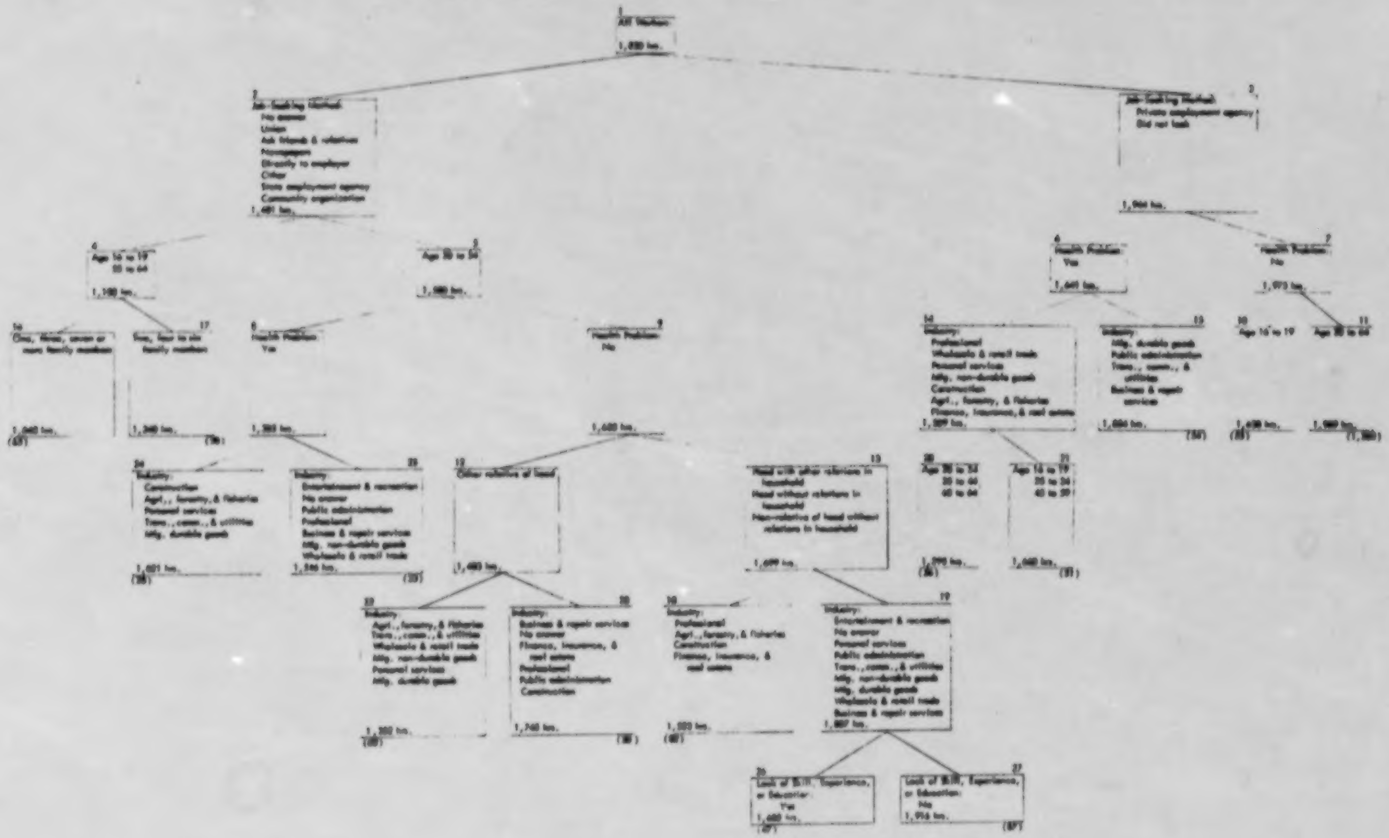

1
All Workers:
1,765 hrs.
2
Job-Seeking Method:
Union
Community organization
No answer
Newspapers
Directly to employer
Ask friends & relatives
State employment agency
Other
Private employment agency
1,345 hrs.
3
Job-Seeking Method:
Did not look
1,911 hrs.
4
Non-relative of head without relations in household
Other relative of head
1,098 hrs.
5
Head with other relations in household
Head without relations in household
Non-relative of head with own relations in household
1,439 hrs.
6
Age 16 to 19
1,547 hrs.
(45)
7
Age 20 to 64
1,928 hrs.
14
Industry:
Wholesale & retail trade
Personal services
Professional
Finance, insurance, & real estate
Public administration
Business & repair services
Construction
927 hrs.
(50)
15
Industry:
Agri., forestry, & fisheries
Entertainment & recreation
Trans., comm., & utilities
Mfg. non-durable goods
Mfg. durable goods
No answer
1,287 hrs.
(44)
10
Occupation:
Laborers (except farm)
Service workers
Operatives (except trans.)
Craftsmen & foremen
Trans. equip. operatives
Managerial & admin.
1,402 hrs.
11
Occupation:
Sales
All farm workers
Clerical
Professional & technical
1,755 hrs.
(26)
8
Health Problem:
Yes
1,770 hrs.
9
Health Problem:
No
1,941 hrs.
(870)
12
Industry:
Personal services
Construction
Agri., forestry, & fisheries
Finance, insurance, & real estate
Business & repair services
1,201 hrs.
(49)
13
Industry:
Professional
Mfg. non-durable goods
Trans., comm., & utilities
Wholesale & retail trade
Mfg. durable goods
Public administration
1,458 hrs.
(175)
16
Years Lived at Present Address:
1 year or less
1,541 hrs.
(25)
17
Years Lived at Present Address:
2 or more years
1,887 hrs.
(49)

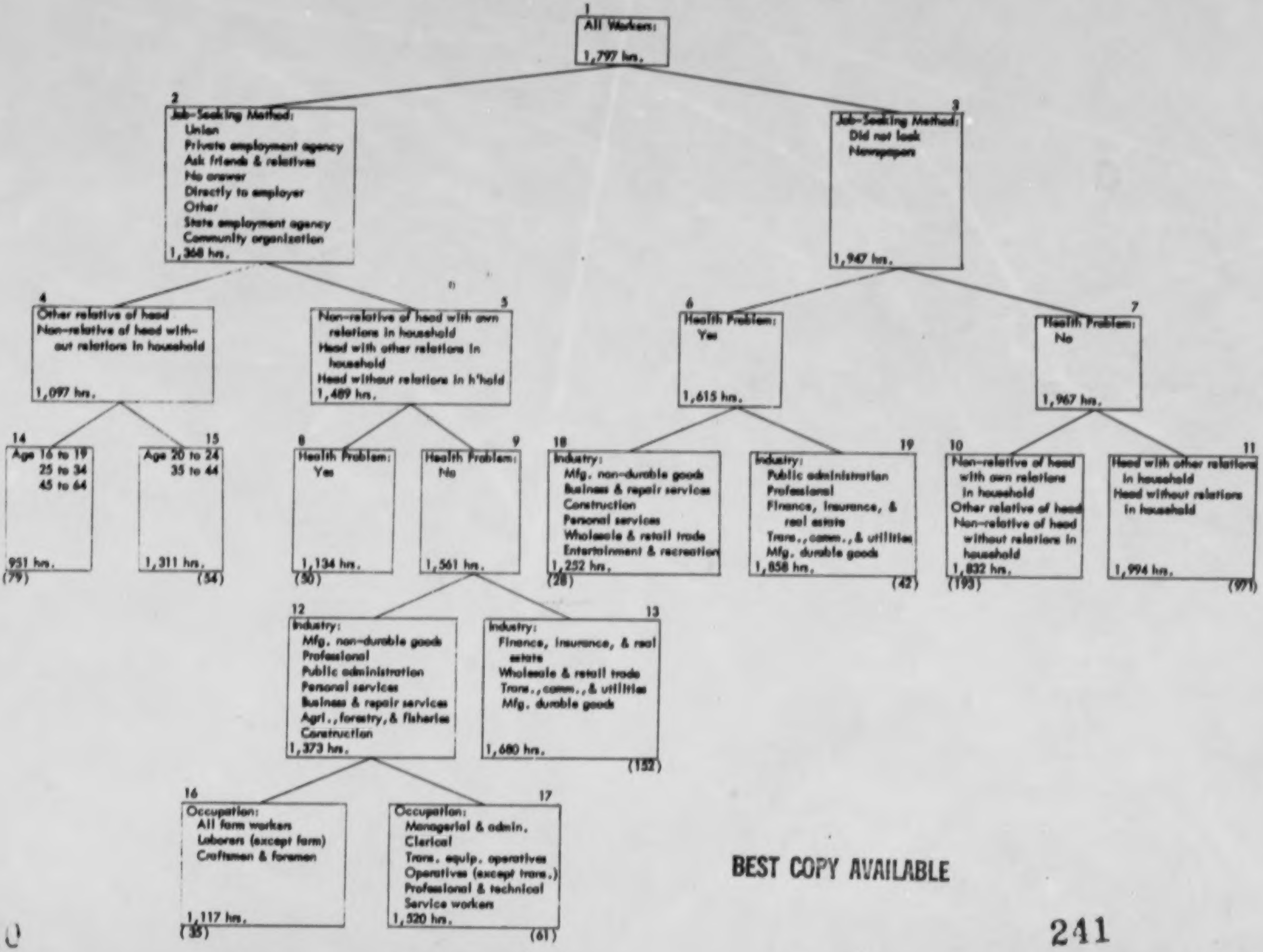
Figure 6 Annual Hours Employed, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,[illegible] Workers)



1 All Workers
2 Job-Seeking Method: No answer, Union, Ask friends & relatives, Newspapers, Directly to employer, Other, State employment agency, Community organization
3 Job-Seeking Method: Private employment agency, Did not look
4 Age 16 to 19, 55 to 64
5 Age 20 to 54
6 Health Problem: Yes
7 Health Problem: No
8 Health Problem: Yes
9 Health Problem: No
10 Age 16 to 19
11 Age 20 to 64
12 Other relative of head
13 Head with other relatives in household, Head without relatives in household, Non-relative of head without relatives in household
14 Industry: Professional, Wholesale & retail trade, Personal services, Mfg. non-durable goods, Construction, Agri., forestry, & fisheries, Finance, insurance, & real estate
15 Industry: Mfg. durable goods, Public administration, Trans., comm., & utilities, Business & repair services
16 One, three, seven or more family members
17 Two, four to six family members
18 Industry: Professional, Agri., forestry, & fisheries, Construction, Finance, insurance, & real estate
19 Industry: Entertainment & recreation, No answer, Personal services, Public administration, Trans., comm., & utilities, Mfg. non-durable goods, Mfg. durable goods, Wholesale & retail trade, Business & repair services
20 Age 20 to 34, 35 to 44, 60 to 64
21 Age 16 to 19, 25 to 34, 45 to 59
22 Industry: Agri., forestry, & fisheries, Trans., comm., & utilities, Wholesale & retail trade, Mfg. non-durable goods, Personal services, Mfg. durable goods
23 Industry: Business & repair services, No answer, Finance, insurance, & real estate, Professional, Public administration, Construction
24 Industry: Construction, Agri., forestry, & fisheries, Personal services, Trans., comm., & utilities, Mfg. durable goods
25 Industry: Entertainment & recreation, No answer, Public administration, Professional, Business & repair services, Mfg. non-durable goods, Wholesale & retail trade
26 Lack of Skill, Experience, or Education: Yes
27 Lack of Skill, Experience, or Education: No
1,740 hrs.
1,916 hrs.

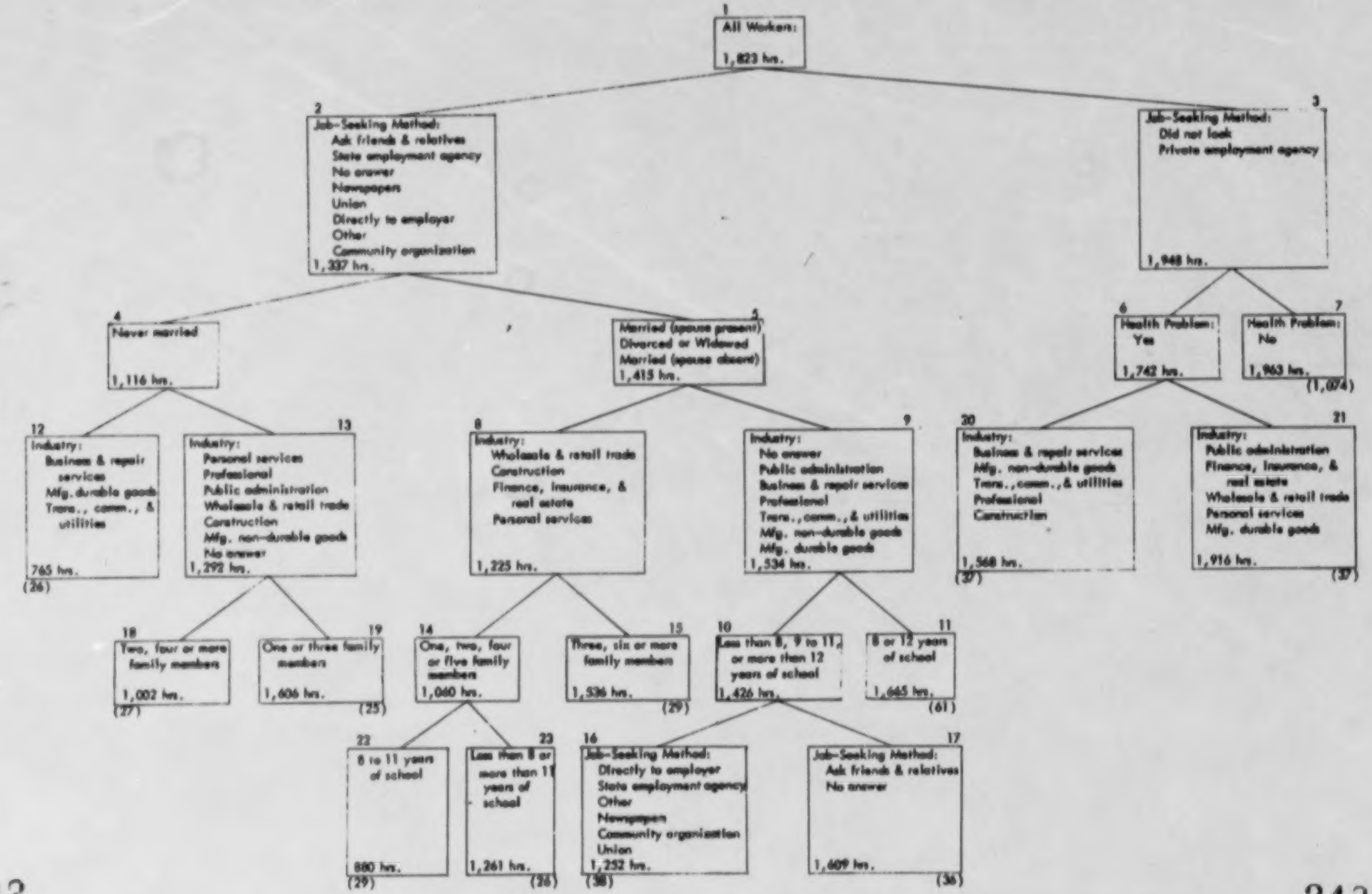
BEST COPY AVAILABLE

Figure 7. Annual Hours Employed, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area 1) Poverty Area (1,665 Workers)


1
All Workers:
1,797 hrs.
2
Job-Seeking Method:
Union
Private employment agency
Ask friends & relatives
No answer
Directly to employer
Other
State employment agency
Community organization
1,368 hrs.
3
Job-Seeking Method:
Did not look
Newspapers
1,947 hrs.
4
Other relative of head
Non-relative of head without relations in household
1,097 hrs.
5
Non-relative of head with own relations in household
Head with other relations in household
Head without relations in h'hold
1,489 hrs.
6
Health Problem:
Yes
1,615 hrs.
7
Health Problem:
No
1,967 hrs.
14
Age 16 to 19
25 to 34
45 to 64
951 hrs.
(79)
15
Age 20 to 24
35 to 44
1,311 hrs.
(54)
8
Health Problem:
Yes
1,134 hrs.
(50)
9
Health Problem:
No
1,561 hrs.
18
Industry:
Mfg. non-durable goods
Business & repair services
Construction
Personal services
Wholesale & retail trade
Entertainment & recreation
1,252 hrs.
(28)
19
Industry:
Public administration
Professional
Finance, insurance, & real estate
Trans., comm., & utilities
Mfg. durable goods
1,858 hrs.
(42)
10
Non-relative of head with own relations in household
Other relative of head
Non-relative of head without relations in household
1,832 hrs.
(193)
11
Head with other relations in household
Head without relations in household
1,994 hrs.
(971)
12
Industry:
Mfg. non-durable goods
Professional
Public administration
Personal services
Business & repair services
Agri., forestry, & fisheries
Construction
1,373 hrs.
13
Industry:
Finance, insurance, & real estate
Wholesale & retail trade
Trans., comm., & utilities
Mfg. durable goods
1,680 hrs.
(152)
16
Occupation:
All farm workers
Laborers (except farm)
Craftsmen & foremen
1,117 hrs.
(35)
17
Occupation:
Managerial & admin.
Clerical
Trans. equip. operatives
Operatives (except trans.)
Professional & technical
Service workers
1,520 hrs.
(61)

BEST COPY AVAILABLE

Figure 8. Annual Hours Employed, by Group of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)


1
All Workers:
1,823 hrs.
2
Job-Seeking Method:
Ask friends & relatives
State employment agency
No answer
Newspapers
Union
Directly to employer
Other
Community organization
1,337 hrs.
3
Job-Seeking Method:
Did not look
Private employment agency
1,948 hrs.
4
Never married
1,116 hrs.
5
Married (spouse present)
Divorced or Widowed
Married (spouse absent)
1,415 hrs.
6
Health Problem:
Yes
1,742 hrs.
7
Health Problem:
No
1,963 hrs.
(1,074)
12
Industry:
Business & repair services
Mfg. durable goods
Trans., comm., & utilities
765 hrs.
(26)
13
Industry:
Personal services
Professional
Public administration
Wholesale & retail trade
Construction
Mfg. non-durable goods
No answer
1,292 hrs.
8
Industry:
Wholesale & retail trade
Construction
Finance, insurance, & real estate
Personal services
1,225 hrs.
9
Industry:
No answer
Public administration
Business & repair services
Professional
Trans., comm., & utilities
Mfg. non-durable goods
Mfg. durable goods
1,534 hrs.
20
Industry:
Business & repair services
Mfg. non-durable goods
Trans., comm., & utilities
Professional
Construction
1,568 hrs.
(37)
21
Industry:
Public administration
Finance, insurance, & real estate
Wholesale & retail trade
Personal services
Mfg. durable goods
1,916 hrs.
(37)
18
Two, four or more family members
1,002 hrs.
(27)
19
One or three family members
1,606 hrs.
(25)
14
One, two, four or five family members
1,060 hrs.
15
Three, six or more family members
1,536 hrs.
(29)
10
Less than 8, 9 to 11, or more than 12 years of school
1,426 hrs.
11
8 or 12 years of school
1,665 hrs.
(61)
22
8 to 11 years of school
880 hrs.
(29)
23
Less than 8 or more than 11 years of school
1,261 hrs.
(26)
16
Job-Seeking Method:
Directly to employer
State employment agency
Other
Newspapers
Community organization
Union
1,252 hrs.
(38)
17
Job-Seeking Method:
Ask friends & relatives
No answer
1,609 hrs.
(36)

BEST COPY AVAILABLE

Table 49. Annual Hours Employed of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
9	1,941	297	870	*Job-Seeking Method:* did not look. *Age:* 20-64. *Health Problem:* no.
17	1,887	310	49	*Job-Seeking Method:* did not look. *Age:* 20-64. *Health Problem:* yes. *Years at Present Address:* 2 or more years.
11	1,755	352	26	*Job-Seeking Method:* union; community organization; no answer; newspapers; directly to employer; ask friends & relatives; state employment agency; other; private employment agency. *Relation to Head:* head with other relations in household; head without relations in household; non-relative of head with own relations in household. *Occupation:* sales; all farm workers; clerical; professional & technical.
6	1,547	519	45	*Job-Seeking Method:* did not look. *Age:* 16-19.
16	1,541	632	25	*Job-Seeking Method:* did not look. *Age:* 20-64. *Health Problem:* yes. *Years at Present Address:* 1 year or less.
13	1,458	535	175	*Job-Seeking Method:* union; community organization; no answer; newspapers; directly to employer; ask friends & relatives; state employment agency; other; private employment agency. *Relation to Head:* head with other relations in household; head without relations in household; non-relative of head with own relations in household. *Occupation:* laborers (except farm); service workers; operatives (except trans.); craftsmen & foremen; trans. equipment operatives; managerial & admin. *Industry:* professional; mfg. non-durable goods; trans., comm., & utilities; wholesale & retail trade; mfg. durable goods; public administration.

Table 49. (Continued)

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
15	1,287	622	44	Job-Seeking Method: union; community organization; no answer; newspapers; directly to employer; ask friends & relatives; state employment agency; other; private employment agency. Relation to Head: non-relative of head without relations in household; other relative of head. Industry: agri., forestry, & fisheries; entertainment & recreation; trans., comm., & utilities; mfg. non-durable goods; mfg. durable goods; no answer.
12	1,201	538	49	Job-Seeking Method: union; community organization; no answer; newspapers; directly to employer; ask friends & relatives; state employment agency; other; private employment agency. Relation to Head: head with other relations in household; head without relations in household; non-relative of head with own relations in household. Occupation: laborers (except farm); service workers; operatives (except trans.); craftsmen & foremen; trans. equipment operatives; managerial & admin. Industry: personal services; construction; agri., forestry, & fisheries; finance, insurance, & real estate; business & repair services.
14	927	620	50	Job-Seeking Method: union; community organization; no answer; newspapers; directly to employer; ask friends & relatives; state employment agency; other; private employment agency. Relation to Head: non-relative of head without relations in household; other relative of head. Industry: wholesale & retail trade; personal services; professional; finance, insurance, & real estate; public administration; business & repair services; construction.
Total	1,765	485	1,333	

Table 50. Annual Hours Employed of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
11	1,989	217	1,302	Job-Seeking Method: private employment agency; did not look. Health Problem: no. Age: 20-64.
27	1,916	240	87	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 20-54. Health Problem: no. Relation to Head: head with other relations in household; head without relations in household; non-relative of head without relations in household. Industry: entertainment & recreation; no answer; personal services; public administration; trans., comm., & utilities; mfg. non-durable goods; mfg. durable goods; wholesale & retail trade; business & repair services. Lack of Skill, Experience, or Education: no.
15	1,854	428	54	Job-Seeking Method: private employment agency; did not look. Health Problem: yes. Industry: mfg. durable goods; public administration; trans., comm., & utilities; business & repair services.
23	1,745	464	30	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 20-54. Health Problem: no. Relation to Head: other relative of head. Industry: business & repair services; no answer; finance, insurance, & real estate; professional; public administration; construction.
21	1,660	523	51	Job-Seeking Method: private employment agency; did not look. Health Problem: yes. Industry: professional; wholesale & retail trade; personal services; mfg. non-durable goods; construction; agri., forestry, & fisheries; finance, insurance, & real estate. Age: 16-19; 25-34; 45-59.

Table 50. (Continued)

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
10	1,638	430	55	Job-Seeking Method: private employment agency; did not look. Health Problem: no. Age: 16-19.
26	1,605	486	47	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 20-54. Health Problem: no. Relation to Head: head with other relations in household; head without relations in household; non-relative of head without relations in household. Industry: entertainment & recreation; no answer; personal services; public administration; trans., comm., & utilities; mfg. non-durable goods; mfg. durable goods; wholesale & retail trade; business & repair services. Lack of Skill, Experience, or Education: yes.
25	1,546	577	33	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 20-54. Health Problem: yes. Industry: entertainment & recreation; no answer; public administration; professional; business & repair services; mfg. non-durable goods; wholesale & retail trade.
18	1,523	478	82	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 20-54. Health Problem: no. Relation to Head: head with other relations in household; head without relations in household; non-relative of head without relations in household. Industry: professional; agri., forestry, & fisheries; construction; finance, insurance, & real estate.
22	1,352	592	60	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 20-54. Health Problem: no. Relation to

Table 50. (Continued)

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
				Head: other relative of head. Industry: agri., forestry, & fisheries; trans., comm., & utilities; wholesale & retail trade; mfg. non-durable goods; personal services; mfg. durable goods.
17	1,340	595	58	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 16-19; 55-64. Family Size: two, four to six family members.
20	1,295	680	36	Job-Seeking Method: private employment agency; did not look. Health Problem: yes. Industry: professional; wholesale & retail trade; personal services; mfg. non-durable goods; construction; agri.,forestry, & fisheres; finance, insurance, & real estate. Age: 20-24; 35-44; 60-64.
16	1,043	593	65	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 16-19; 55-64. Family Size: one, three, seven or more family members.
24	1,021	552	28	Job-Seeking Method: no answer; union; ask friends & relatives; newspapers; directly to employer; other; state employment agency; community organization. Age: 20-54. Health Problem: yes. Industry: construction; agri., forestry, & fisheries; personal services; trans., comm., & utilities; mfg. durable goods.
Total	1,830	438	1,988	

Table 51. Annual Hours Employed of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
11	1,994	201	971	Job-Seeking Method: did not look; newspapers. Health Problem: no. Relation to Head: head with other relations in household; head without relations in household.
19	1,858	383	42	Job-Seeking Method: did not look; newspapers. Health Problem: yes. Industry: public administration; professional; finance, insurance, & real estate; trans., comm., & utilities; mfg. durable goods.
10	1,832	433	193	Job-Seeking Method: did not look; newspapers. Health Problem: no. Relation to Head: non-relative of head with own relations in household; other relative of head; non-relative of head without relations in household.
13	1,680	480	152	Job-Seeking Method: union; private employment agency; ask friends & relatives; no answer; directly to employer; other; state employment agency; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Health Problem: no. Industry: finance, insurance, & real estate; wholesale & retail trade; trans., comm., & utilities; mfg. durable goods.
17	1,520	564	61	Job-Seeking Method: union; private employment agency; ask friends & relatives; no answer; directly to employer; other; state employment agency; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Health Problem: no.

Table 51. (Continued)

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
				Industry: mfg. non-durable goods; professional; public administration; personal services; business & repair services; agri., forestry, & fisheries; construction. Occupation: managerial & admin.; clerical; trans. equipment operatives; operatives (except trans.); professional & technical; service workers.
15	1,311	645	54	Job-Seeking Method: union; private employment agency; ask friends & relatives; no answer; directly to employer; other; state employment agency; community organization. Relation to Head: other relative of head; non-relative of head without relations in household. Age: 20-24; 35-44.
18	1,252	654	28	Job-Seeking Method: did not look; newspapers. Health Problem: yes. Industry: mfg. non-durable goods; business & repair services; construction; personal services; wholesale & retail trade; entertainment & recreation.
8	1,134	695	50	Job-Seeking Method: union; private employment agency; ask friends & relatives; no answer; directly to employer; other; state employment agency; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Health Problem: yes.
16	1,117	608	35	Job-Seeking Method: union; private employment agency; ask friends & relatives; no answer; directly to employer; other; state employment agency; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Health Problem: no. Industry: mfg. non-durable goods; professional; public administration; personal services; business & repair services; agri., forestry, & fisheries; con-

Table 51. (Continued)

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
				struction. Occupation: all farm workers; laborers (except farm); craftsmen & foremen.
14	951	583	79	Job-Seeking Method: union; private employment agency; ask friends & relatives; no answer; directly to employer; other; state employment agency; community organization. Relation to Head: other relative of head; non-relative of head without relations in household. Age: 16-19; 25-34; 45-64.
Total	1,797	486	1,665	

Table 52. Annual Hours Employed of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
7	1,963	267	1,074	Job-Seeking Method: did not look; private employment agency. Health Problem: no.
21	1,916	383	37	Job-Seeking Method: did not look; private employment agency. Health Problem: yes. Industry: public administration; finance, insurance, & real estate; wholesale & retail trade; personal services; mfg. durable goods.
11	1,665	483	61	Job-Seeking Method: ask friends & relatives; state employment agency; no answer; newspapers; union; directly to employer; other; community organization. Marital Status: married (spouse present); divorced or widowed; married (spouse absent). Industry: no answer; public administration; business & repair services; professional; trans., comm., & utilities; mfg. non-durable goods; mfg. durable goods. Education: 8 or 12 years of school.
17	1,609	568	36	Marital Status: married (spouse present); divorced or widowed; married (spouse absent). Industry: no answer; public administration; business & repair services; professional; trans., comm., & utilities; mfg. non-durable goods; mfg. durable goods. Education: less than 8, 9 to 11, or more than 12 years of school. Job-Seeking Method: ask friends & relatives; no answer.
19	1,606	540	25	Job-Seeking Method: ask friends & relatives; state employment agency; no answer; newspapers; union; directly to employer; other; community organization. Marital Status: never married: Industry: personal services; professional; public administration; wholesale & retail trade; construction; mfg. non-durable goods; no answer. Family Size: one or three family members.

Table 52. (Continued)

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
20	1,568	594	37	Job-Seeking Method: did not look; private employment agency. Health Problem: yes. Industry: business & repair services; mfg. non-durable goods; trans., comm., & utilities; professional; construction.
15	1,536	476	29	Job-Seeking Method: ask friends & relatives; state employment agency; no answer; newspapers; union; directly to employer; other; community organization. Marital Status: married (spouse present); divorced or widowed; married (spouse absent). Industry: wholesale & retail trade; construction; finance, insurance, & real estate; personal services. Family Size: three, six or more family members.
23	1,261	542	26	Job-Seeking Method: ask friends & relatives; state employment agency; no answer; newspapers; union; directly to employer; other; community organization. Marital Status: married (spouse present); divorced or widowed; married (spouse absent). Industry: wholesale & retail trade; construction; finance, insurance, & real estate; personal services. Family Size: one, two, four or five family members. Education: less than 8 or more than 11 years of school.
16	1,252	612	38	Marital Status: married (spouse present); divorced or widowed; married (spouse absent). Industry: no answer; public administration; business & repair services; professional; trans., comm., & utilities; mfg. non-durable goods; mfg. durable goods. Education: less than 8, 9 to 11 or more than 12 years of school. Job-Seeking Method: directly to employer; state employment agency; other; newspapers; community organization; union.

Table 52. (Continued)

Group Number	Mean Hrs. Employed	Standard Deviation	Number of Cases	Characteristics of Workers
18	1,002	675	27	Job-Seeking Method: ask friends & relatives; state employment agency; no answer; newspapers; union; directly to employer; other; community organization. Marital Status: never married. Industry: personal services; professional; public administration; wholesale & retail trade; construction; mfg. non-durable goods; no answer. Family Size: two, four or more family members.
22	880	604	29	Job-Seeking Method: ask friends & relatives; state employment agency; no answer; newspapers; union; directly to employer; other; community organization. Marital Status: married (spouse present); divorced or widowed; married (spouse absent). Industry: wholesale & retail trade; construction; finance, insurance, & real estate; personal services. Family Size: one, two, four or five family members. Education: 8 to 11 years of school.
12	765	535	26	Job-Seeking Method: ask friends & relatives; state employment agency; no answer; newspapers; union; directly to employer; other; community organization. Marital Status: never married. Industry: business & repair services; mfg. durable goods; trans.,comm., & utilities.
Total	1,823	462	1,445	

Our MCA and AID findings have shown that some of the 19 socioeconomic characteristics are associated with variations in employment in poverty areas. Comparison of the MCA results for employment with the MCA results for income indicates that generally the socioeconomic variables have a greater influence on the workers' annual incomes than on the number of hours that they work in a year (although the health problem variable is an important exception to this generalization). Improving human resources and changing economic institutions is likely to increase the employment levels of ghetto workers who are working only part-time and/or part-year. For these workers more employment should bring them more income. However, many poverty-area workers already are employed at least 40 hours a week and 48 weeks in a year. Consequently, raising their employment levels further is not a feasible strategy for helping them struggle against poverty. Nevertheless we find that upgrading education and skills, family ties, and job-seeking methods, plus changing workers' occupational and industrial attachments, also affect income levels directly. Without working additional hours per year, poverty-area workers should be able to increase their incomes through personal upgrading and a shift to high-wage occupations and industries.

Chapter 6

UNEMPLOYMENT

In the last chapter we reported on the socioeconomic characteristics that are associated with differences in hours of employment. In an effort to learn more about the forces that affect employment we now consider the unemployment levels of poverty-area workers. Are the forces that lengthen employment levels the same ones that shorten unemployment levels? Not necessarily, because unemployment and employment rates are not simply two sides of the same coin. A person can work part-time and/or part-year without ever being unemployed (i.e., without a job and searching for work or on layoff from a job). A worker's employment level may be low because part of the year he was unemployed, or because he was underemployed, or because he dropped out of the labor force. Thus, unemployment is only one of at least three types of non-participation in employment activities.

Because seeking work is not as drastic a departure from employment as dropping out of the labor force, unemployment can be viewed as a positive activity. It does reflect the decision and ability of the worker to put forth some effort to find employment, and, as a result, he is more likely to become employed than is the labor force drop-out. However, in this chapter we examine unemployment as a measure of the extent to which workers fail to achieve employment. Also, from this perspective we do not view the person seeking part-time work as any less unemployed than the person seeking full-time work. For the purposes of this analysis a week of unemployment is given the same weight whether it applies to a part-time or a full-time worker.

Some of the methodological techniques used in analyzing the unemployment levels of the poverty area workers are different from those that were used in studying the other dependent variables. To search for interaction patterns we used the THAID computer program instead of the AID program. As explained in Chapter 3, we decided that the THAID program would be more appropriate to use with the unemployment samples because of their small size (ranging from 192 cases in Chicago II to 293 cases in San Antonio). We did not include the poverty-area workers without any unemployment in this analysis because the large numbers in this category would have made the dependent variable too "unbalanced." That is to say, with the dependent variable heavily weighted with workers who did not experience unemployment, our statistical techniques would not have been able to measure effectively the impact of the socio-economic characteristics on variations in unemployment.

For both the MCA and THAID analyses the unemployment measure was set up in a dichotomous form, with workers unemployed 400 hours or less in one category and workers unemployed more than 400 hours in the other category. Therefore, our MCA program used a two point scale procedure in which "0" equals "400 hours or less" and "1" equals "more than 400 hours." Thus, one is using a "proportion" scale in the sense that a grand mean of 61.8 (as shown for St. Louis in Table 57) indicates that 61.8 percent of the sample was unemployed over 400 hours during the previous year. The deviations from the grand mean are expressed in percentage points. For example, the unadjusted deviation of -9.0 shown in Table 57 for white workers indicates that the average for this group (52.8 percent) is nine percentage points lower than the grand-mean percentage.

Because of the smaller samples the predictors with many categories sometimes include too few cases in some of the categories to provide reasonably stable estimates of their means. Consequently, the MCA findings for these categories should be considered as suggestive only. However, including categories with very small numbers does no damage to the estimates in the other categories. The MCA program manual does state that:

> ...there should be substantially more cases than there are degrees of freedom in the predictive model. (The degrees of freedom is equal to the sum of the number of categories for each of the predictors minus the total number of predictors) (Andrews, et al., 1967:19-20)

As indicated in Chapter 3, use of the THAID computer program required a limit of ten categories per variable. Therefore we combined some categories within the occupation variable and within the industry variable in order to meet this restriction. These smaller sets of categories were also used in the MCA for unemployment. In addition, job-seeking method also has one less category in the MCA and THAID calculations because "did not look" is not applicable to the poverty-area workers who were unemployed during the previous year. Also, there are some categories in some areas that have no cases (e.g., all farm workers). As a result, the categories total to 90 in St. Louis, 91 in San Antonio, 92 in Chicago I, and 87 in Chicago II. (Some "no answer" categories included in these totals are not shown in the tables.) Thus, after subtracting the total number of predictors (19) the degrees of freedom in the predictive model comes to 71 in St. Louis, 72 in San Antonio, 73 in Chicago I, and 68 in Chicago II. Subtracting the degrees of freedom from the total sample leaves a surplus of 162 cases in St. Louis, 221 cases in San Antonio, 199 cases in Chicago I, and 105 in Chicago II.

We believe that there are a sufficient number of cases to provide meaningful results in the unadjusted MCA findings, but we are not sure that we can be confident about the outcome in the adjusted figures. Therefore, we will describe and interpret only the unadjusted data, although we have included the adjusted figures in the MCA tables for inspection.

In our discussion of the unemployment findings we will refer sometimes to higher and lower rates or levels of unemployment. The reader should keep in mind, however, that our dependent variable measures the percentage of workers in the over 400 hours of employment category; it does not measure specific hours of unemployment.

We hypothesized that the patterns of relationship between each independent variable and unemployment would be the reverse of the patterns that we predicted for employment. (See Table 27.) For example, we predicted that white workers would have higher employment levels than black workers. Therefore, we also predicted that white workers would have lower unemployment levels (i.e., a smaller percentage in the "more than 400 hours" category) than black workers.

MCA and THAID Summary Statistics

The MCA Eta-squared and Beta-squared coefficients for the four poverty-areas are presented in Tables 53, 54, 55, and 56. We ranked the predictors according to the sizes of their Eta-squared statistics in each area and then computed the average (mean) rank in the four areas for each predictor. The final ranks of the predictors are as follows:

Final Rank	Eta^2	Mean Rank	Final Rank	Eta^2	Mean Rank
1.	Industry	3.8	5.	Occupation	6.3
2.	Job-Seeking Method	3.8	6.	Years at Present Address	6.9
3.	Age	5.5	7.	Family Size	8.5
4.	Where Lived at Age 16	5.6	8.	Education	8.9

Final Rank	Eta^2	Mean Rank	Final Rank	Eta^2	Mean Rank
9.	Class of Worker	9.1	15.	Household Size	14.3
10.	Marital Status	9.4	16.	Health Problem	14.4
11.	Age Problem	9.6	17.	Veteran Status	15.3
12.	Relation to Head	9.8	18.	Ethnicity	16.5
13.	Race	10.4	19.	Lack Skill, Exp., or Ed.	17.9
14.	Job-Training	14.0			

We calculated some F ratios for a selection of the Eta-squared coefficients of various sizes. Unfortunately none of these coefficients appears to be large enough to be significant at the .05 level, though some of the larger ones come fairly close. Probably if our unemployment samples were as large as the samples for the income and employment analyses the larger coefficients would be statistically significant. Many of the Eta-squared figures are as large or larger than the figures for variables of comparable rank in the employment figures. We do, however, have the opportunity to see if the sizes of the coefficients show some consistency among all four areas, so this provides some clues about the extent to which the findings reflect more than sampling fluctuations.

We see in the rankings that most of the relatively strong variables (the eight highest) are those that also had strong relationships with employment level. However, there are some major differences. Where lived at age 16, family size, and education rank considerably higher in the unemployment than in the employment data. In turn, marital status, health problem, and relation to head rank lower in the unemployment than in the employment statistics. Not all of the predictors that have a high mean rank are high in every area. Industry ranks lower (below the top 8 variables) in San Antonio, where lived at age 16 ranks lower in Chicago I, years at present address is lower in St. Louis and Chicago II, family size is lower in St. Louis, and education is lower in St. Louis and Chicago II.

Table 53. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	THAID Delta
Race	.015	.002	.118
Ethnicity	.001	.001	.000
Where Lived at Age 16	.034	.045	.140
Education	.006	.021	.056
Job Training	.006	.014	.074
Veteran Status	.007	.004	.083
Age	.031	.128	.140
Marital Status	.047	.038	.205
Relation to Head	.045	.052	.187
Family Size	.003	.041	.050
Household Size	.012	.083	.051
Years at Present Address	.013	.022	--
Job-Seeking Method	.052	.057	.222
Health Problem	.001	.000	.000
Age Problem	.023	.027	.000
Lack Skill, Exp., or Ed.	.000	.000	.019
Occupation	.026	.033	.107
Industry	.066	.073	.201
Class of Worker	.022	.007	.000

MCA R^2 = .048

MCA R (adj.) = .220

Table 54. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, San Antonio Poverty Area

Variable	MCA Eta^2	MCA Beta^2	THAID Delta
Race	.003	.005	.037
Ethnicity	.006	.011	.062
Where Lived at Age 16	.030	.036	.084
Education	.020	.016	.101
Job Training	.003	.010	.050
Veteran Status	.001	.013	.024
Age	.039	.049	.162
Marital Status	.010	.059	.085
Relation to Head	.023	.135	.143
Family Size	.012	.012	.090
Household Size	.006	.029	.041
Years at Present Address	.050	.031	--
Job-Seeking Method	.023	.026	.095
Health Problem	.008	.004	.069
Age Problem	.019	.022	.079
Lack Skill, Exp., or Ed.	.000	.000	.006
Occupation	.027	.033	.146
Industry	.011	.015	.098
Class of Worker	.007	.009	.029

MCA R^2 = .032

MCA R (adj.) = .179

Table 55. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, Chicago (Area I) Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	THAID Delta
Race	.015	.008	.122
Ethnicity	.005	.008	.055
Where Lived at Age 16	.008	.019	.076
Education	.026	.079	.110
Job Training	.000	.001	.009
Veteran Status	.001	.001	.020
Age	.022	.021	.134
Marital Status	.008	.075	.059
Relation to Head	.009	.079	.067
Family Size	.020	.029	.105
Household Size	.004	.025	.060
Years at Present Address	.041	.028	--
Job-Seeking Method	.026	.039	.092
Health Problem	.010	.009	.072
Age Problem	.010	.000	.061
Lack Skill, Exp., or Ed.	.000	.005	.001
Occupation	.011	.039	.075
Industry	.030	.075	.125
Class of Worker	.012	.032	.001

MCA R^2 = .000

MCA R (adj.) = .000

Table 56. MCA and THAID Summary Statistics for 19 Predictors of Per Cent Unemployed Over 400 Hours, Male Workers 16 to 64 Years Old, Not In School or Armed Forces, Chicago (Area II) Poverty Area

Variable	MCA Eta^2	MCA Beta^2	THAID Delta
Race	.016	.067	.000
Ethnicity	.000	.046	.000
Where Lived at Age 16	.057	.052	.217
Education	.011	.056	.100
Job Training	.018	.001	.131
Veteran Status	.006	.017	.075
Age	.015	.013	.075
Marital Status	.012	.129	.083
Relation to Head	.002	.014	.036
Family Size	.033	.084	.136
Household Size	.003	.038	.011
Years at Present Address	.003	.014	--
Job-Seeking Method	.032	.054	.136
Health Problem	.002	.000	.000
Age Problem	.010	.032	.000
Lack Skill, Exp., or Ed.	.003	.008	.050
Occupation	.028	.079	.069
Industry	.053	.111	.200
Class of Worker	.018	.044	.000

MCA R^2 = .025

MCA R (adj.) = .157

Tables 53, 54, 55 and 56 also present the THAID-Delta statistics for each area. The THAID-Delta statistics shown in the summary tables indicate the explanatory power (the possible range is from .000 to 1.000) for each of the 18 predictors (years at present address was not included) for the total sample and without any controls on the other variables. Therefore, these Delta figures measure the extent to which each predictor is able to divide the workers into the high and low unemployment categories on the first split in the THAID tree. (Later in this chapter we will present the THAID interaction models.)

We ranked the predictors according to the sizes of their Delta statistics in each area and then computed the average (mean) rank in the four areas for each predictor. The final ranks of the predictors are as follows:

Final Rank	Delta	Mean Rank	Final Rank	Delta	Mean Rank
1.	Industry	3.0	10.	Race	9.8
2.	Age	4.1	11.	Job-Training	11.0
3.	Job-Seeking Method	4.3	12.	Veteran Status	12.3
4.	Where Lived at Age 16	5.6	13.	Household Size	12.8
5.	Education	6.3	14.	Health Problem	13.1
6.	Occupation	7.0 Tied	15.	Age Problem	13.6
7.	Family Size	7.0	16.	Ethnicity	14.4
8.	Relation to Head	7.3	17.	Lack Skill, Exp., or Ed.	15.3
9.	Marital Status	7.5	18.	Class of Worker	17.0

Comparison of the THAID-Delta results for the total sample with the MCA Eta-squared results reveals that the variable rankings are quite similar for the stronger variables. The only major differences in the THAID rankings are the absence of years at present address (which was accidently left out of the THAID analysis) from the top ranks and the inclusion of relation to head, which ranks eighth. In the MCA findings relation to head ranks twelfth. Not all of the stronger predictors rank eighth or higher in the THAID figures for every area, but none shows a major drop in ranking where this occurs.

MCA Detailed Findings

Tables 57-72 provide all of the detailed MCA findings on unemployment. We see that there is considerable variation between areas in the average percent of workers unemployed over 400 hours. The grand mean for Chicago II is highest (62.5 percent), followed by St. Louis (61.8 percent), San Antonio (50.9 percent), and then Chicago I (47.8 percent).

Table 73 summarizes how well the unadjusted relationships between the socioeconomic predictors and unemployment follow the hypothesized patterns.

The data on racial differences show that in three of the four areas black workers are overrepresented in the high unemployment category. Chicago II shows white workers with a higher unemployment level; however, their sample size is relatively small. In each area except San Antonio we find that the white workers are underrepresented in the unemployment sample in comparison with their proportions in the larger sample that was used for the income and employment analyses.

The findings on ethnicity show that in every area workers of Spanish origin are underrepresented in the high unemployment category (in St. Louis and in Chicago II the Spanish-origin sample is quite small). This is an unexpected finding. A difficulty in interpreting the unemployment findings is that a shorter period of unemployment could mean either that the worker has spent more time employed or more time not in the labor force, or both. Thus, when we unexpectedly find that Spanish-origin workers have a lower unemployment level, our first reaction is to suggest that this means they drop out of the labor force more than non-Spanish-origin workers. However, when we look back at the employment findings for the total sample we see that only in St. Louis do Spanish-origin workers have lower employment levels. In San Antonio the levels are the same for both groups and in the two Chicago areas Spanish-origin workers have higher employment

Table 57. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (233 Workers)

	Grand Mean =61.8%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Race			
White	-9.0	-3.1	72
Negro	4.0	1.4	161
Other	--	--	--
Ethnicity			
Spanish origin	-11.8	-10.7	4
Non-Spanish origin	0.2	0.2	229
Where Lived at Age 16			
This city	5.1	4.9	121
Suburb	-28.5	7.1	3
Large city	-1.8	12.7	10
Medium city	-11.8	-11.2	10
Small city	-5.8	-10.5	50
Country	-61.8	-68.0	2
Farm	8.8	12.0	17
No answer	-6.8	-8.9	20
Education			
7 years or less	-0.4	-6.6	44
8 years	1.6	-0.2	41
9 to 11 years	3.1	2.3	77
12 years	-1.4	9.5	48
13 years or more	-9.6	-14.6	23
Job Training			
Yes	-5.0	-7.7	81
No	2.7	4.1	152
Veteran Status			
Veteran	-4.7	-3.5	98
Non-Veteran	3.4	2.6	135

Table 58. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (293 Workers)

	Grand Mean = 50.9%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Race			
White	-1.0	1.3	259
Negro	8.0	-10.1	34
Other	--	--	--
Ethnicity			
Spanish origin	-1.9	-2.5	239
Non-Spanish origin	8.4	11.1	54
Where Lived at Age 16			
This city	-1.9	-1.4	190
Suburb	-50.9	-52.5	2
Large city	15.8	10.0	15
Medium city	31.0	37.2	11
Small city	-0.9	-4.5	58
Country	--	--	--
Farm	-17.5	-12.1	6
No answer	3.7	12.7	11
Education			
7 years or less	-1.3	-2.5	121
8 years	-10.9	-6.5	30
9 to 11 years	10.8	11.4	60
12 years	-3.0	-3.1	71
13 years or more	9.1	6.3	10
Job Training			
Yes	3.6	7.0	101
No	-1.9	-3.7	192
Veteran Status			
Veteran	-2.0	-8.6	90
Non-Veteran	0.9	3.8	203

Table 59. Relationship Between Per Cent Unemployed Over 400 Hours and Socio-economic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (272 Workers)

Characteristic	Grand Mean = 47.8%		Number of Cases
	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	
Race			
White	-5.9	-2.6	136
Negro	6.5	4.0	127
Other	-3.3	-16.9	9
Ethnicity			
Spanish origin	-6.7	-8.9	56
Non-Spanish origin	1.7	2.3	216
Where Lived at Age 16			
This city	3.2	6.5	102
Suburb	2.2	4.3	2
Large city	-3.1	0.5	38
Medium city	-8.9	-16.6	18
Small city	-4.2	-4.6	55
Country	12.2	9.6	10
Farm	2.2	-7.8	28
No answer	-0.4	-0.7	19
Education			
7 years or less	-0.4	4.4	38
8 years	9.0	20.6	44
9 to 11 years	3.1	3.0	112
12 years	-3.6	-11.1	52
13 years or more	-19.8	-32.3	25
Job Training			
Yes	0.9	3.0	74
No	-0.3	-1.1	198
Veteran Status			
Veteran	-1.8	-2.8	74
Non-Veteran	0.7	1.0	198

Table 60. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (192 Workers)

	Grand Mean = 62.5%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Race			
White	12.5	24.4	20
Negro	-1.1	-2.1	171
Other	-62.5	-131.8	1
Ethnicity			
Spanish origin	-5.4	53.3	7
Non-Spanish origin	0.2	-2.0	185
Where Lived at Age 16			
This city	8.6	4.5	83
Suburb	-62.5	-71.2	1
Large city	4.2	11.1	18
Medium city	8.9	13.6	21
Small city	-14.0	-11.1	33
Country	-29.2	-26.0	3
Farm	-6.9	-15.2	18
No answer	-15.8	-4.6	15
Education			
7 years or less	-3.4	9.3	22
8 years	7.9	18.2	27
9 to 11 years	2.9	2.7	81
12 years	-6.5	-15.3	50
13 years or more	-4.2	-12.6	12
Job Training			
Yes	9.6	2.3	61
No	-4.5	-1.1	131
Veteran Status			
Veteran	5.2	8.7	65
Non-Veteran	-2.7	-4.5	127

levels. Going back to the income data, however, we find that Spanish-origin workers earned less than non-Spanish-origin workers in each area except Chicago II. Thus, the data suggest that only in Chicago II do Spanish-origin workers work more and earn a little more than non-Spanish-origin workers. In Chicago I they work more, but earn less, in San Antonio they work the same and earn less, and in St. Louis they work less and earn considerably less than non-Spanish-origin workers. So we see a variety of relationships between unemployment, employment, and income levels for Spanish-origin and non-Spanish-origin workers.

Given the smaller sample sizes for the unemployment data and the rather large number of categories for our variable measuring where the poverty-area workers lived at age 16, we find that some of the categories have too few cases to consider the analysis. Workers who lived in the local area at age 16 are by far the largest in number in each poverty area. In contrast, in each of the areas there are not enough workers from the suburbs who were unemployed during the previous year to make up a meaningful sample in that category. This is also the situation for workers from the country (who did not live on a farm), with the possible exception of Chicago I.

We hypothesized that the percentage of workers unemployed over 400 hours is lower for those from either a farm or a small city and higher for those from either a medium-sized city, a large city, or the city in which the poverty-area is located. Chicago II is the only area that completely follows the hypothesized pattern. St. Louis only partially follows the expected pattern as the farm category is above average in the percentage with lengthy unemployment and the medium-city and large-city categories are below the average. The San Antonio area also deviates some from the hypothesized pattern as the percentage of workers raised in San Antonio who were unemployed over 400 hours is slightly below the average. However, the figures in all of the other four categories examined support our hypothesis.

The Chicago I area findings differ too much to be classified as partially supporting our hypothesis. Only two categories produce what we predicted: workers from Chicago I ("this city") have an above-average chance of experiencing lengthy unemployment while workers from small cities have a below-average chance of being unemployed for a long period. It should be noted, however, that these two categories contain the largest numbers of workers.

In three of the areas education tends to follow the expected pattern in which unemployment decreases as education increases. However, in three areas we also find unemployment relatively low for workers in the lowest educational category

(7 years or less). In the total sample workers in this group have lower employment and income levels, so it would appear that these workers spend more time out of the labor force.

Workers with job training show higher unemployment levels in three areas and a lower level in St. Louis. However, only in Chicago II is the difference very large. In the total sample, workers in this area with job training do work less, but their income level still is slightly above average. Of course, in these comparisons we do not actually know if the workers with higher unemployment are the ones in the total sample who worked less and earned more.

Veterans are underrepresented in the high unemployment category except in Chicago II, but the differences between veterans and non-veterans are not very large in any area.

The age findings tend to follow the expected pattern, but in some areas older workers have higher unemployment levels than younger workers. Workers 20 to 44 years old show the lowest proportions in the high unemployment categories in each area except Chicago II.

The relationship of marital status with unemployment level varies to some extent among the areas, but in every area married workers with spouse present show a lower unemployment level than do single workers. It is the relative levels in the other categories that fluctuate between areas.

Household status also shows some pattern differences between areas, but heads with other relations in household always show a lower percentage in the high employment category than do workers classified as heads without relations in household or as other relative of head.

The findings for family size do not show a very clear or consistent pattern among the areas. In St. Louis there is a tendency for workers from larger families to be underrepresented in the high unemployment category while in Chicago I the reverse is found. In San Antonio and Chicago II there is no systematic relationship between family size and unemployment. Household size also does not show a consistent pattern among the areas.

We predicted that unemployment level would have a negative association with years at present address, but in three of the areas the pattern is not found at all, and in Chicago I it is only partially found. The total patterns differ among the areas, but in all of the areas we find that workers who have lived at their present residence one year or less are underrepresented in the high unemployment category.

Job-seeking method partially supports our hypothesis in three areas and completely supports it in the San Antonio area. We have to be careful about making generalizations about these findings because of the small number of cases in some of the categories. The most common job-seeking method in each area is going directly to the employer and the next most popular method is asking friends or relatives. Each of the other methods is much less likely to be used by

Table 61. Relationship Between Per Cent Unemployed Over 400 Hours and Socio-economic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (233 Workers)

	Grand Mean = 61.8%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Age			
16 to 19 years	10.2	-39.6	25
20 to 24 years	-9.4	-13.7	42
25 to 34 years	-4.2	0.7	59
35 to 44 years	1.2	12.7	54
45 to 54 years	-4.7	11.7	28
55 to 59 years	21.5	22.4	18
60 to 64 years	9.6	16.0	7
Marital Status			
Married, spouse present	-8.2	-7.8	138
Married, spouse absent	11.3	14.4	26
Divorced or widowed	24.9	7.2	15
Never married	8.6	11.0	54
Relation to Head			
Head with other relations in household	-6.9	-7.1	144
Head without relations in household	-0.3	0.3	26
Non-relative of head, with own relations in household	-11.8	-4.3	2
Non-relative of head, without relations in household	13.2	-5.9	8
Other relative of head	17.4	20.1	53
Family Size			
1 person	2.9	17.8	34
2 persons	1.4	11.1	38
3 persons	-0.1	-4.7	47
4 persons	3.8	-8.1	32
5 persons	-3.0	-10.1	17
6 persons	-1.8	-3.0	25
7 persons or more	-4.3	-7.5	40

Table 62. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (293 Workers)

Characteristic	Grand Mean = 50.9% Deviation from Grand Mean (Per Cent)	Grand Mean = 50.9% Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Age			
16 to 19 years	7.5	-6.9	60
20 to 24 years	-5.7	-12.4	62
25 to 34 years	-9.0	-0.1	55
35 to 44 years	-8.0	-0.4	42
45 to 54 years	7.5	14.3	48
55 to 59 years	2.1	11.8	17
60 to 64 years	38.0	35.2	9
Marital Status			
Married, spouse present	-2.7	9.6	162
Married, spouse absent	-0.9	2.2	22
Divorced or widowed	-8.7	-29.2	19
Never married	6.9	-11.6	90
Relation to Head			
Head with other relations in household	-5.8	-16.0	151
Head without relations in household	-3.5	-7.9	19
Non-relative of head, with own relations in household	--	--	--
Non-relative of head, without relations in household	-17.5	-9.0	6
Other relative of head	9.0	22.4	117
Family Size			
1 person	-6.9	-13.8	25
2 persons	6.6	-3.0	40
3 persons	-3.0	-0.9	46
4 persons	3.0	5.6	39
5 persons	-7.6	0.2	37
6 persons	10.7	9.5	26
7 persons or more	-0.9	0.4	80

Table 63. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area 1) Poverty Area (272 Workers)

	Grand Mean = 47.8%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Age			
16 to 19 years	14.7	11.2	32
20 to 24 years	-6.4	-5.3	58
25 to 34 years	-5.1	-6.2	68
35 to 44 years	-3.6	-2.2	52
45 to 54 years	7.0	4.4	42
55 to 59 years	10.5	20.0	12
60 to 64 years	2.2	6.7	8
Marital Status			
Married, spouse present	-2.8	-13.9	120
Married, spouse absent	5.5	24.1	30
Divorced or widowed	14.7	19.7	16
Never married	-0.6	6.0	106
Relation to Head			
Head with other relations in household	-0.9	9.4	130
Head without relations in household	3.1	10.6	53
Non-relative of head, with own relations in household	--	--	--
Non-relative of head, without relations in household	12.1	-19.5	28
Other relative of head	4.7	-20.4	61
Family Size			
1 person	-2.1	-4.8	81
2 persons	-11.0	-15.0	38
3 persons	-0.2	2.3	42
4 persons	-3.3	11.1	36
5 persons	2.2	-0.4	22
6 persons	12.2	12.0	15
7 persons or more	12.7	7.8	38

Table 64. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (192 Workers)

Characteristic	Grand Mean = 62.5%		Number of Cases
	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	
Age			
16 to 19 years	1.5	-3.5	25
20 to 24 years	2.2	3.5	34
25 to 34 years	-1.7	0.6	51
35 to 44 years	1.6	2.7	39
45 to 54 years	-4.2	4.6	24
55 to 59 years	23.2	-19.7	7
60 to 64 years	-12.5	-11.4	12
Marital Status			
Married, spouse present	-1.9	-9.9	94
Married, spouse absent	0.8	-10.5	30
Divorced or widowed	-12.5	-14.7	16
Never married	6.7	28.5	52
Relation to Head			
Head with other relations in household	-1.0	3.3	104
Head without relations in household	2.7	5.5	23
Non-relative of head, with own relations in household	--	--	--
Non-relative of head, without relations in household	-3.7	0.0	17
Other relative of head	2.1	-9.7	48
Family Size			
1 person	0.0	3.4	40
2 persons	4.2	5.0	36
3 persons	-10.1	-13.2	21
4 persons	7.5	12.4	20
5 persons	-16.7	-27.4	24
6 persons	15.3	25.2	18
7 persons or more	1.1	-2.5	33

Table 65. Relationship Between Per Cent Unemployed Over 400 Hours and Socio-economic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (233 Workers)

	Grand Mean = 61.8%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Household Size			
1 person	-7.6	-37.2	24
2 persons	4.1	-8.0	41
3 persons or more	-0.6	7.0	165
Years at Present Address			
1 year or less	0.3	1.2	103
2 to 5 years	-2.6	-0.7	71
6 to 10 years	9.2	8.6	31
11 to 20 years	-9.6	-18.8	23
21 years or more	18.2	18.2	5
Job-Seeking Method			
State employment service	22.4	25.6	19
Directly to employer	10.4	6.1	54
Asked friends or relatives	-9.0	-10.5	36
Newspapers	-11.8	5.4	6
Union	9.6	17.0	7
Private employment agency	4.9	1.4	9
Community organizations	-11.8	-39.8	4
All other methods	10.9	9.4	11
Did not look in past 12 months	--	--	--
No answer	-8.9	-6.3	87
Health Problem			
Yes	-4.7	-3.6	14
No	0.3	0.2	219
Age Problem			
Yes	26.4	28.5	17
No	-2.1	-2.2	216
Lack Skill, Experience or Education			
Yes	1.4	-0.1	76
No	-0.7	0.0	157

Table 66. Relationship Between Per Cent Unemployed Over 400 Hours and Socio-economic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (293 Workers)

	Grand Mean = 50.9%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Household Size			
1 person	6.3	33.2	14
2 persons	4.7	7.8	45
3 persons or more	-1.1	-3.4	233
Years at Present Address			
1 year or less	-8.2	-5.8	122
2 to 5 years	-7.6	-6.6	67
6 to 10 years	11.6	14.4	32
11 to 20 years	12.6	5.9	52
21 years or more	24.1	19.1	20
Job-Seeking Method			
State employment service	15.8	10.4	21
Directly to employer	1.3	4.4	117
Asked friends or relatives	-3.2	-0.8	84
Newspapers	2.1	-4.1	17
Union	-22.3	-18.0	7
Private employment agency	-50.9	-54.6	1
Community organizations	9.1	6.9	10
All other methods	4.1	-7.8	20
Did not look in past 12 months	--	--	--
No answer	-13.4	-21.2	16
Health Problem			
Yes	9.9	7.3	51
No	-2.1	-1.5	242
Age Problem			
Yes	22.2	23.8	26
No	-2.2	-2.3	267
Lack Skill, Experience or Education			
Yes	0.4	-0.2	123
No	-0.3	0.2	170

Table 67. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (272 Workers)

	Grand Mean = 47.8%		
Characteristic	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Household Size			
1 person	-2.3	-14.0	66
2 persons	-5.9	6.7	43
3 persons or more	2.5	3.9	161
Years at Present Address			
1 year or less	-5.2	-2.0	148
2 to 5 years	4.6	1.2	63
6 to 10 years	18.9	14.1	42
11 to 20 years	-12.5	-15.2	17
21 years or more	-47.8	-56.2	2
Job-Seeking Method			
State employment service	2.2	-2.0	6
Directly to employer	-1.1	0.1	92
Asked friends or relatives	-2.5	-6.8	53
Newspapers	-36.7	-39.5	9
Union	18.9	39.3	3
Private employment agency	-7.8	-5.7	5
Community organizations	2.2	14.0	12
All other methods	-2.3	0.9	11
Did not look in past 12 months	--	--	--
No answer	6.5	5.5	81
Health Problem			
Yes	12.2	11.3	40
No	-2.1	-1.9	232
Age Problem			
Yes	14.3	1.8	29
No	-1.7	-0.2	243
Lack Skill, Experience or Education			
Yes	-0.1	5.0	88
No	0.0	-2.4	184

Table 68. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (192 Workers)

Characteristic	Grand Mean = 62.5% Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Household Size			
1 person	0.0	-17.8	24
2 persons	0.3	-1.2	43
3 persons or more	-0.4	3.1	124
Years at Present Address			
1 year or less	-1.7	5.8	74
2 to 5 years	0.7	-3.3	68
6 to 10 years	1.8	-2.1	28
11 to 20 years	4.2	-11.1	18
21 years or more	-12.5	12.4	4
Job-Seeking Method			
State employment service	12.5	11.3	8
Directly to employer	1.7	-4.8	53
Asked friends or relatives	-3.7	-13.7	34
Newspapers	17.5	13.1	10
Union	25.0	36.7	8
Private employment agency	37.5	27.2	1
Community organizations	4.2	23.5	3
All other methods	-12.5	21.5	2
Did not look in past 12 months	--	--	--
No answer	-6.3	0.9	73
Health Problem			
Yes	5.9	0.2	19
No	-0.7	0.0	173
Age Problem			
Yes	19.3	35.2	11
No	-1.2	-2.1	181
Lack Skill, Experience or Education			
Yes	3.6	6.3	62
No	-1.7	-3.0	130

Table 69. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (233 Workers)

Characteristic	Grand Mean = 61.8%		
	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Occupation			
Professional and technical	-21.8	-13.1	10
Managerial and administrative	38.2	33.9	4
Sales	--	--	--
Clerical	4.9	7.5	12
Craftsmen and foremen	-3.7	-9.5	43
All operatives	-2.3	5.0	84
Service and private household workers	3.1	6.2	37
Laborers, except farm	6.5	-6.5	41
All farm workers	-11.8	-32.7	2
Industry			
Agriculture, forestry, fisheries, and mining	4.9	17.8	3
Durable and nondurable goods manufacturing	-3.5	-1.2	115
Construction	16.5	22.7	23
Finance, insurance, real estate, and professional services	-11.8	-23.7	22
Personal services, entertainment, and recreation	38.2	35.4	6
Transportation, communication, and utilities	-19.7	-11.2	19
Wholesale and retail trade	10.6	3.7	29
Public administration	13.2	-5.0	4
Business and repair services	10.9	5.5	11
Class of Worker			
Private	-1.5	-1.3	209
Government	9.6	14.0	14
Self-employed	27.1	5.7	9
Without pay in family business	--	--	--

Table 70. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (293 Workers)

Characteristic	Grand Mean = 50.9% Deviation from Grand Mean (Per Cent)	Grand Mean = 50.9% Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Occupation			
Professional and technical	15.8	6.0	12
Managerial and administrative	15.8	33.7	6
Sales	-25.9	-28.5	4
Clerical	-17.5	-18.2	9
Craftsmen and foremen	-5.9	0.0	80
All operatives	6.3	3.4	63
Service and private household workers	-6.9	-12.2	50
Laborers, except farm	5.8	6.5	60
All farm workers	4.7	1.1	9
Industry			
Agriculture, forestry, fisheries, and mining	3.7	-8.0	11
Durable and nondurable goods manufacturing	4.5	4.5	47
Construction	-4.9	-5.0	74
Finance, insurance, real estate, and professional services	4.0	5.5	31
Personal services, entertainment, and recreation	-8.7	-7.0	19
Transportation, communication, and utilities	-5.4	-10.3	11
Wholesale and retail trade	4.4	4.3	67
Public administration	-4.7	-11.2	13
Business and repair services	-3.8	7.6	17
Class of Worker			
Private	-0.6	-0.5	245
Government	0.8	2.7	31
Self-employed	10.7	10.0	13
Without pay in family business	-50.9	-68.9	1

Table 71. Relationship Between Per Cent Unemployed Over 400 Hours and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (272 Workers)

Characteristic	Grand Mean = 47.8%		
	Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Occupation			
Professional and technical	-11.4	5.7	11
Managerial and administrative	-14.5	-23.8	3
Sales	--	--	--
Clerical	2.2	2.5	32
Craftsmen and foremen	3.3	-3.9	45
All operatives	-2.2	5.1	101
Service and private household workers	5.0	-10.1	36
Laborers, except farm	-2.8	-7.3	40
All farm workers	27.2	60.7	4
Industry			
Agriculture, forestry, fisheries, and mining	12.2	-26.4	5
Durable and nondurable goods manufacturing	-3.7	-8.7	127
Construction	20.6	24.7	19
Finance, insurance, real estate, and professional services	-10.3	11.6	24
Personal services, entertainment, and recreation	9.3	18.7	14
Transportation, communication, and utilities	-4.9	-9.2	21
Wholesale and retail trade	-0.9	-4.5	32
Public administration	15.8	32.8	11
Business and repair services	2.2	8.4	18
Class of Worker			
Private	0.0	1.3	247
Government	-2.3	-20.1	22
Self-employed	-47.8	-26.1	1
Without pay in family business	52.2	101.7	1

Table 72. Relationship Between Per Cent Unemployed Over 400 Hours and Socio-economic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (192 Workers)

Characteristic	Grand Mean = 62.5% Deviation from Grand Mean (Per Cent)	Adjusted Deviation from Grand Mean (Per Cent)	Number of Cases
Occupation			
Professional and technical	37.5	44.1	3
Managerial and administrative	4.2	20.2	3
Sales	37.5	54.5	4
Clerical	0.7	-12.6	19
Craftsmen and foremen	0.5	2.3	27
All operatives	0.2	6.6	67
Service and private household workers	-9.2	-18.2	30
Laborers, except farm	-1.0	-3.4	39
All farm workers	--	--	--
Industry			
Agriculture, forestry, fisheries, and mining	--	--	--
Durable and nondurable goods manufacturing	-9.1	-10.0	73
Construction	2.9	-0.2	26
Finance, insurance, real estate, and professional services	-15.8	-18.8	15
Personal services, entertainment, and recreation	4.2	33.5	9
Transportation, communication, and utilities	4.2	-9.1	18
Wholesale and retail trade	19.9	26.4	34
Public administration	4.2	-16.7	6
Business and repair services	1.1	7.5	11
Class of Worker			
Private	0.9	0.2	175
Government	-2.5	10.2	15
Self-employed	-62.5	-95.9	2
Without pay in family business	--	--	--

poverty-area workers. In all of the areas workers who asked friends or relatives are underrepresented in the high unemployment category, while those who went directly to the employer show average to above-average representation in the high category. Workers who used the State Employment Service were more likely to have experienced longer unemployment periods.

Health problems follow the hypothesized pattern in three of the four areas. Only in St. Louis are workers with a health problem underrepresented in the high unemployment category. St. Louis has the smallest sample of workers with a health problem (14 cases).

Age problem follows the hypothesized pattern in all four areas. Moreover, workers who indicate that age is an employment problem show a high probability of being in the high unemployment category. However, not many of the workers in the unemployment sample said that age is a problem.

Lack of skill, experience, or education was listed as a problem by a sizable number of workers, but in every area their unemployment level differs only slightly from the levels for the other workers in the sample.

Occupation is difficult to evaluate because the unemployment sample sizes for workers in the white-collar jobs are quite small. According to the findings our hypothesis that white-collar workers and craftsmen and foremen would be underrepresented in the high unemployment category is only partially supported in three of the areas and not supported at all in Chicago II.

The industry results also are difficult to interpret because of the small number of workers in some of the categories. The findings, however, suggest partial support for our hypothesis in each area. The main deviation from our hypothesis occurs with public administration, which shows a higher unemployment level in three of the areas. However, in each area the sample is quite small.

Table 73. Summary of Relationships Between Socioeconomic Variables and Percent Unemployed Over 400 Hours that Follow (F), Partially Follow (P), and Do Not Follow (N) Patterns Hypothesized

	Unadjusted Findings			
	SL	SA	Ch.I	Ch.II
Antecedent Personal Variables				
Race	F	F	F	N
Ethnicity	N	N	N	N
Where Lived at Age 16	P	P	N	F
Education	P	N	P	P
Job Training	F	N	N	N
Veteran Status	F	F	F	N
Current Personal Variables				
Age	P	P	P	P
Marital Status	P	P	P	P
Relation to Head	F	P	P	P
Family Size	P	N	P	N
Household Size	N	P	P	N
Years at Present Address	N	N	P	N
Labor Force Variables				
Job-Seeking Method	P	F	P	P
Health Problem	N	F	F	F
Age Problem	F	F	F	F
Lack Skill, Experience, or Education	F	N	N	F
Occupation	P	P	P	N
Industry	P	P	P	P
Class of Worker	P	P	P	P

Class of worker also shows partial support in each area. However, the sample of self-employed workers is quite small in each area and the sample of government workers is not much larger.

In sum, the MCA findings indicate that some of the socioeconomic variables are less successful in predicting length of unemployment than in predicting length of employment. Nevertheless, there is some evidence that racial discrimination, residential origin, education, family responsibilities and relationships, age, health, job-seeking methods, and occupational and industrial attachment do contribute to the length of time a worker is unemployed.

The MCA R-square in each area is quite small or zero after adjusting for degrees of freedom. However, the actual proportion of variance explained by the 19 predictors prior to making any allowance for the degrees of freedom is .340 in St. Louis, .271 in San Antonio, .253 in Chicago I, and .372 in Chicago II.

THAID Findings

Figures 9, 10, 11, and 12 show the patterns of relationship uncovered by the THAID analysis of the unemployment data. Like AID, THAID generates sequential binary splits on the given categorical predictors. It selects the predictors that when split into two groups will maximize the difference in the distribution of the dependent variable between these two groups. However, instead of providing the mean number of hours of unemployment, as would have been the format if we had used the AID program, this procedure presents the modal hours of unemployment with each subgroup. Thus, with the dependent variable set up in the dichotomous form, the THAID tree shown in Figure 9 indicates which category of unemployment ("more than 400 hours" or "400 hours or less") is the modal category in the subgroup, and the number and percentage of workers in that category. It also shows the Delta (D) statistic for each split.

Figure 9. Modal Hours Unemployed (THAID Model, Delta Criterion) by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces Unemployed in the Last 12 Months, St. Louis Poverty Area (233 Workers)

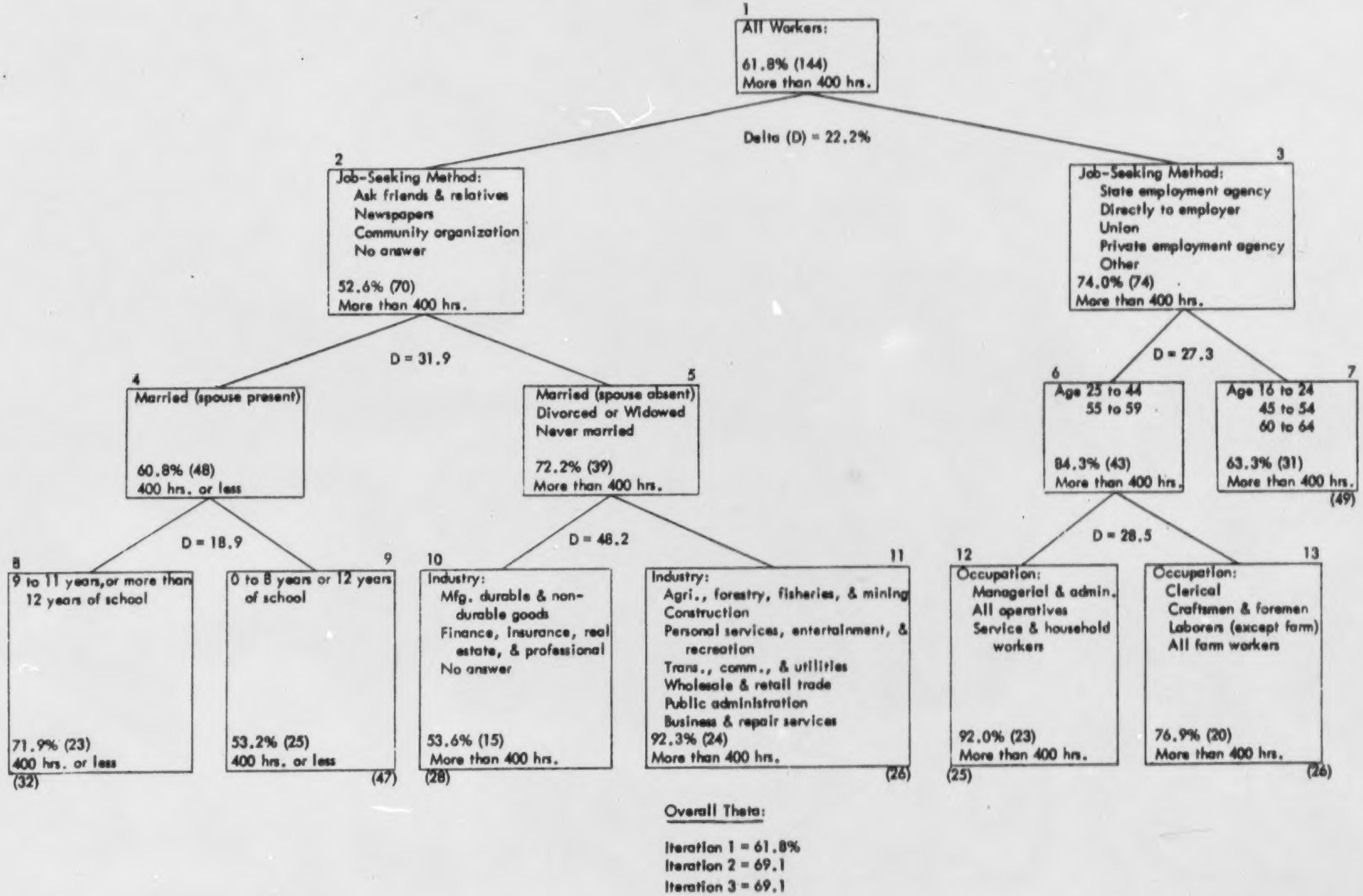

1
All Workers:
61.8% (144)
More than 400 hrs.
Delta (D) = 22.2%
2
Job-Seeking Method:
Ask friends & relatives
Newspapers
Community organization
No answer
52.6% (70)
More than 400 hrs.
3
Job-Seeking Method:
State employment agency
Directly to employer
Union
Private employment agency
Other
74.0% (74)
More than 400 hrs.
D = 31.9
D = 27.3
4
Married (spouse present)
60.8% (48)
400 hrs. or less
5
Married (spouse absent)
Divorced or Widowed
Never married
72.2% (39)
More than 400 hrs.
6
Age 25 to 44
55 to 59
84.3% (43)
More than 400 hrs.
7
Age 16 to 24
45 to 54
60 to 64
63.3% (31)
More than 400 hrs.
(49)
D = 18.9
D = 48.2
D = 28.5
8
9 to 11 years, or more than 12 years of school
71.9% (23)
400 hrs. or less
(32)
9
0 to 8 years or 12 years of school
53.2% (25)
400 hrs. or less
(47)
10
Industry:
Mfg. durable & non-durable goods
Finance, insurance, real estate, & professional
No answer
53.6% (15)
More than 400 hrs.
(28)
11
Industry:
Agri., forestry, fisheries, & mining
Construction
Personal services, entertainment, & recreation
Trans., comm., & utilities
Wholesale & retail trade
Public administration
Business & repair services
92.3% (24)
More than 400 hrs.
(26)
12
Occupation:
Managerial & admin.
All operatives
Service & household workers
92.0% (23)
More than 400 hrs.
(25)
13
Occupation:
Clerical
Craftsmen & foremen
Laborers (except farm)
All farm workers
76.9% (20)
More than 400 hrs.
(26)
Overall Theta:
Iteration 1 = 61.8%
Iteration 2 = 69.1
Iteration 3 = 69.1

Figure 10. Modal Hours Unemployed (THAID Model, Delta Criterion) by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces Unemployed in the Last 12 Months, San Antonio Poverty Area (293 Workers)

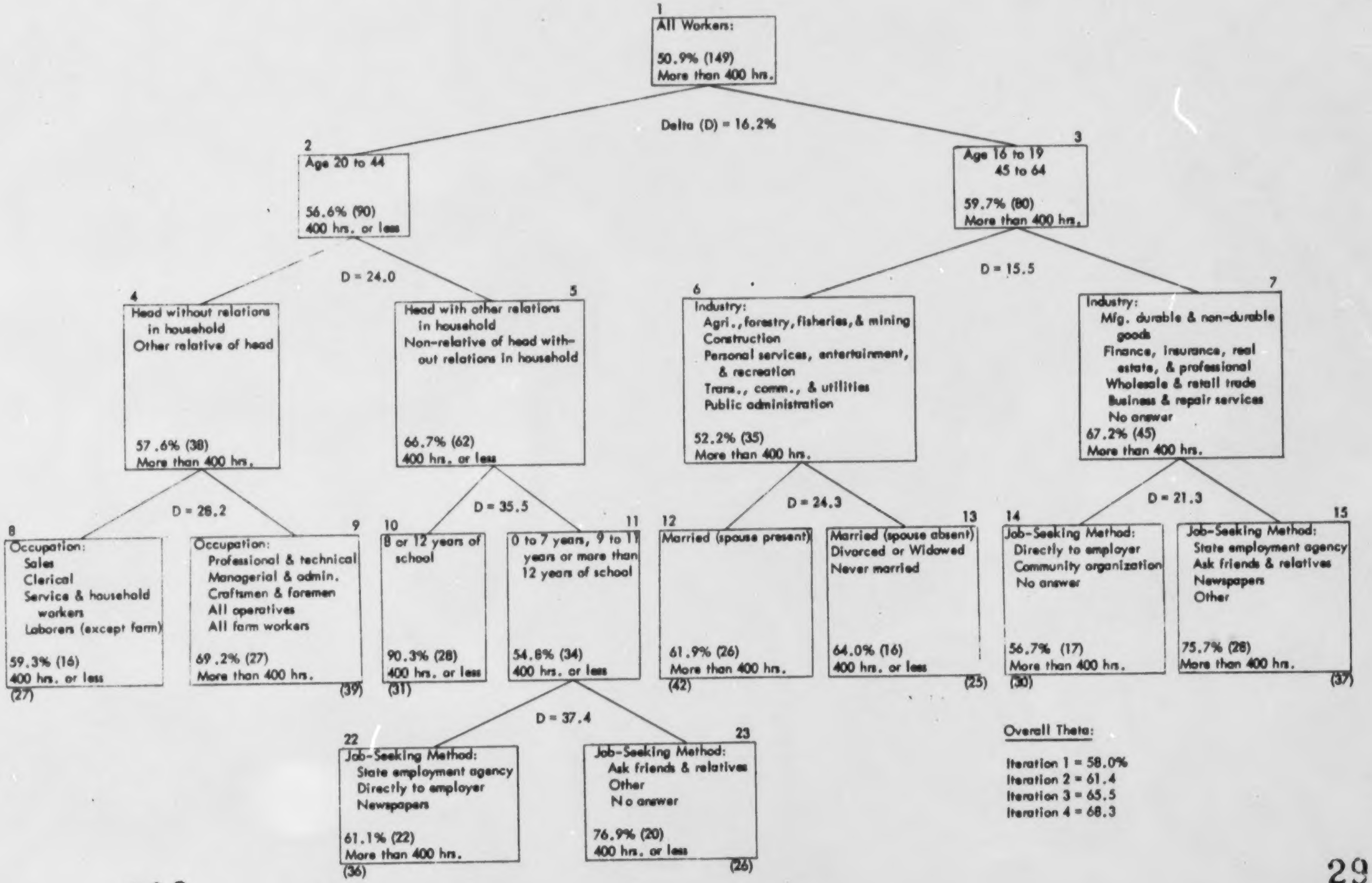

1
All Workers:
50.9% (149)
More than 400 hrs.
Delta (D) = 16.2%
2
Age 20 to 44
56.6% (90)
400 hrs. or less
3
Age 16 to 19
45 to 64
59.7% (80)
More than 400 hrs.
D = 24.0
D = 15.5
4
Head without relations in household
Other relative of head
57.6% (38)
More than 400 hrs.
5
Head with other relations in household
Non-relative of head without relations in household
66.7% (62)
400 hrs. or less
6
Industry:
Agri., forestry, fisheries, & mining
Construction
Personal services, entertainment, & recreation
Trans., comm., & utilities
Public administration
52.2% (35)
More than 400 hrs.
7
Industry:
Mfg. durable & non-durable goods
Finance, insurance, real estate, & professional
Wholesale & retail trade
Business & repair services
No answer
67.2% (45)
More than 400 hrs.
D = 28.2
D = 35.5
D = 24.3
D = 21.3
8
Occupation:
Sales
Clerical
Service & household workers
Laborers (except farm)
59.3% (16)
400 hrs. or less
(27)
9
Occupation:
Professional & technical
Managerial & admin.
Craftsmen & foremen
All operatives
All farm workers
69.2% (27)
More than 400 hrs.
(39)
10
8 or 12 years of school
90.3% (28)
400 hrs. or less
(31)
11
0 to 7 years, 9 to 11 years or more than 12 years of school
54.8% (34)
400 hrs. or less
12
Married (spouse present)
61.9% (26)
More than 400 hrs.
(42)
13
Married (spouse absent)
Divorced or Widowed
Never married
64.0% (16)
400 hrs. or less
(25)
14
Job-Seeking Method:
Directly to employer
Community organization
No answer
56.7% (17)
More than 400 hrs.
(30)
15
Job-Seeking Method:
State employment agency
Ask friends & relatives
Newspapers
Other
75.7% (28)
More than 400 hrs.
(37)
D = 37.4
22
Job-Seeking Method:
State employment agency
Directly to employer
Newspapers
61.1% (22)
More than 400 hrs.
(36)
23
Job-Seeking Method:
Ask friends & relatives
Other
No answer
76.9% (20)
400 hrs. or less
(26)
Overall Theta:
Iteration 1 = 58.0%
Iteration 2 = 61.4
Iteration 3 = 65.5
Iteration 4 = 68.3

Figure 11. Modal Hours Unemployed (THAID Model, Delta Criterion) by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces Unemployed in the Last 12 Months, Chicago (Area 1) Poverty Area (272 Workers)

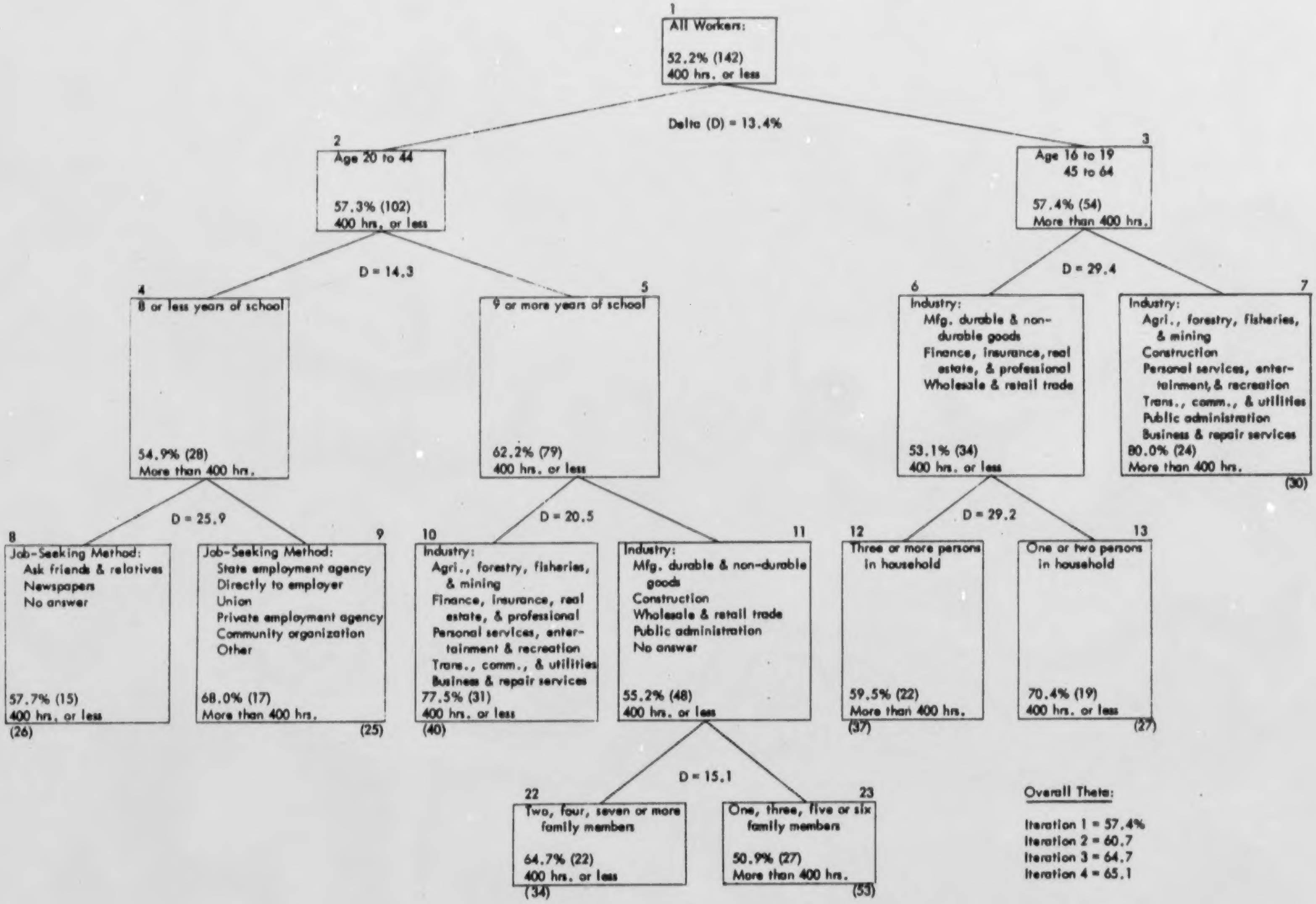
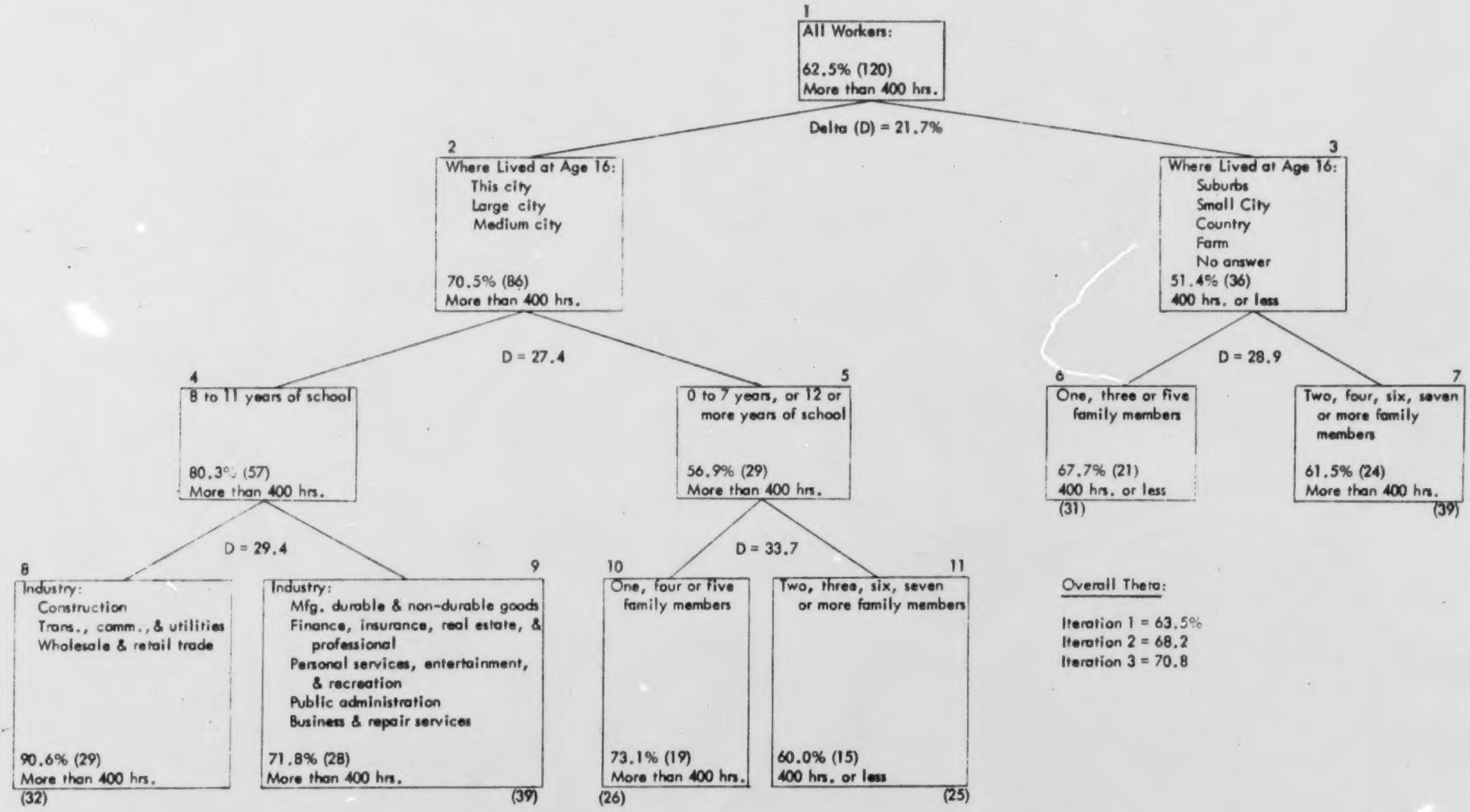

1
All Workers:
52.2% (142)
400 hrs. or less
Delta (D) = 13.4%
2
Age 20 to 44
57.3% (102)
400 hrs. or less
3
Age 16 to 19
45 to 64
57.4% (54)
More than 400 hrs.
D = 14.3
4
8 or less years of school
54.9% (28)
More than 400 hrs.
5
9 or more years of school
62.2% (79)
400 hrs. or less
D = 29.4
6
Industry:
Mfg. durable & non-durable goods
Finance, insurance, real estate, & professional
Wholesale & retail trade
53.1% (34)
400 hrs. or less
7
Industry:
Agri., forestry, fisheries, & mining
Construction
Personal services, entertainment, & recreation
Trans., comm., & utilities
Public administration
Business & repair services
80.0% (24)
More than 400 hrs.
(30)
D = 25.9
8
Job-Seeking Method:
Ask friends & relatives
Newspapers
No answer
57.7% (15)
400 hrs. or less
(26)
9
Job-Seeking Method:
State employment agency
Directly to employer
Union
Private employment agency
Community organization
Other
68.0% (17)
More than 400 hrs.
(25)
D = 20.5
10
Industry:
Agri., forestry, fisheries, & mining
Finance, insurance, real estate, & professional
Personal services, entertainment & recreation
Trans., comm., & utilities
Business & repair services
77.5% (31)
400 hrs. or less
(40)
11
Industry:
Mfg. durable & non-durable goods
Construction
Wholesale & retail trade
Public administration
No answer
55.2% (48)
400 hrs. or less
D = 29.2
12
Three or more persons in household
59.5% (22)
More than 400 hrs.
(37)
13
One or two persons in household
70.4% (19)
400 hrs. or less
(27)
D = 15.1
22
Two, four, seven or more family members
64.7% (22)
400 hrs. or less
(34)
23
One, three, five or six family members
50.9% (27)
More than 400 hrs.
(53)
Overall Theta:
Iteration 1 = 57.4%
Iteration 2 = 60.7
Iteration 3 = 64.7
Iteration 4 = 65.1

Figure 12. Modal Hours Unemployed (THAID Model, Delta Criterion) by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces Unemployed in the Last 12 Months, Chicago (Area II) Poverty Area (192 Workers)


1
All Workers:
62.5% (120)
More than 400 hrs.
Delta (D) = 21.7%
2
Where Lived at Age 16:
This city
Large city
Medium city
70.5% (86)
More than 400 hrs.
3
Where Lived at Age 16:
Suburbs
Small City
Country
Farm
No answer
51.4% (36)
400 hrs. or less
D = 27.4
D = 28.9
4
8 to 11 years of school
80.3% (57)
More than 400 hrs.
5
0 to 7 years, or 12 or more years of school
56.9% (29)
More than 400 hrs.
6
One, three or five family members
67.7% (21)
400 hrs. or less
(31)
7
Two, four, six, seven or more family members
61.5% (24)
More than 400 hrs.
(39)
D = 29.4
D = 33.7
8
Industry:
Construction
Trans., comm., & utilities
Wholesale & retail trade
90.6% (29)
More than 400 hrs.
(32)
9
Industry:
Mfg. durable & non-durable goods
Finance, insurance, real estate, & professional
Personal services, entertainment, & recreation
Public administration
Business & repair services
71.8% (28)
More than 400 hrs.
(39)
10
One, four or five family members
73.1% (19)
More than 400 hrs.
(26)
11
Two, three, six, seven or more family members
60.0% (15)
400 hrs. or less
(25)
Overall Theta:
Iteration 1 = 63.5%
Iteration 2 = 68.2
Iteration 3 = 70.8

The THAID program does not number the groups in the THAID tree in the same sequence as the AID program does for the groups in the AID tree. In the AID tree the groups are numbered by the order in which the subdividing occurred. Because the AID splitting procedure is ordered according to the size of the reduction in predictive error, the sequence of numbers shown in an AID tree does not follow a constant pattern. However, rather than numbering the groups as they are developed, the THAID program "numbers them systematically as though a symmetric tree were to be developed in every case, and each row were to be produced by splits starting with the left-most group" (Morgan and Messenger, 1973: 39).

Each row of groups, starting with the second row, is called an "iteration." For example, in Figure 9, groups 2 and 3 are the first iteration, and groups 4, 5, 6, and 7 are the second iteration. In the first iteration we see how job-seeking method sorted the St. Louis poverty area workers. Group 3 has a higher proportion (74 percent) with more than 400 hours of unemployment than does group 2 (52.6 percent). Unlike the AID program, the THAID program does not rank the variable categories within each group according to their dependent variable averages.

The Overall-Theta statistics shown at the bottom of Figure 9 indicate the power of modal prediction for each iteration. The Theta for iteration 1 is the same as it was before the first split (61.8 percent) because both groups 2 and 3 have the same mode as group 1 (more than 400 hours). In iteration 2, however, group 4 has a different modal prediction than the other groups in the iteration. Consequently, the overall Theta statistic increases to 69.1 from the predictive power gained in this set of splits. With the third iteration, however, no increase occurs in the Theta figure because none of the new subdivisions predicts a mode that is different from the mode in the preceding group. Thus the Overall-

Theta statistics say that modal predictions based on the THAID tree patterns should be correct 69.1 percent of the time. On the other hand, if one does not base his modal predictions on the group differences shown in the THAID groupings, but simply predicts that every worker in the St. Louis poverty area will be unemployed more than 400 hours, he is likely to be correct 61.8 percent of the time, the mode for the sample as a whole.

The THAID models do not add much to what we learned from the MCA results. In the Chicago I and Chicago II models (Figures 11 and 12) the splits on family size appear to reflect random fluctuations. However, in Chicago I we see household size interacting with industry and age. Household size is a weak variable in the sample as a whole, according to the MCA, but here we see that young and old workers in industries with lower unemployment levels are much less likely to be unemployed over 400 hours if they live in one- or two-person households than if they live in larger households.

Tables 74, 75, 76, and 77 present the rankings of the final THAID groups, starting with the group with the largest percentage in the lower unemployment category. Also presented are the combinations of characteristics that define each final group.

Table 74. Proportions Unemployed 400 Hours or Less and More than 400 Hours, Male Workers 16-64 Years Old, Not in School or Armed Forces, Unemployed in the Last 12 Months, St. Louis Poverty Area, Final THAID Groups (Delta Criterion)

Group Number	Per Cent Unemployed 400 Hours or Less	 More Than 400 Hours	Number of Cases	Characteristics of Workers
8	71.9%	28.1%	32	Job-Seeking Method: ask friends & relatives; newspapers; community organization; no answer. Marital Status: married (spouse present). Education: 9 to 11 years, or more than 12 years of school.
9	53.2	46.8	47	Job-Seeking Method: ask friends & relatives; newspapers; community organization; no answer. Marital Status: married (spouse present). Education: 0 to 8 years, or 12 years of school.
10	46.4	53.6	28	Job-Seeking Method: ask friends & relatives; newspapers; community organization; no answer. Marital Status: married (spouse absent); divorced or widowed; never married. Industry: mfg. durable & non-durable goods; finance, insurance, real estate, & professional; no answer.
7	36.7	63.3	49	Job-Seeking Method: state employment agency; directly to employer; union; private employment agency; other. Age: 16-24; 45-54; 60-64.
13	23.1	76.9	26	Job-Seeking Method: state employment agency; directly to employer; union; private employment agency; other. Age: 25-44; 55-59. Occupation: clerical; craftsmen & foremen; laborers (except farm); all farm workers.
12	8.0	92.0	25	Job-Seeking Method: state employment agency; directly to employer; union; private employment agency; other. Age: 25-44; 55-59. Occupation: managerial & admin.; all operatives; service & household workers.

Table 74. (Continued)

	Per Cent Unemployed			
Group Number	400 Hours or Less	More Than 400 Hours	Number of Cases	Characteristics of Workers
11	7.7%	92.3	26	Job-Seeking Method: ask friends & relatives; newspapers; community organization; no answer. Marital Status: married (spouse absent); divorced or widowed; never married. Industry: agri., forestry, fisheries, & mining; construction; personal services, entertainment, & recreation; trans., comm., & utilities; wholesale & retail trade; public administration; business & repair services.
Total	38.2%	61.8%	233	

Table 75. Proportions Unemployed 400 Hours or Less and More than 400 Hours, Male Workers 16-64 Years Old, Not in School or Armed Forces, Unemployed in the Last 12 Months, San Antonio Poverty Area, Final THAID Groups (Delta Criterion)

Group Number	Per Cent Unemployed 400 Hours or Less	Per Cent Unemployed More Than 400 Hours	Number of Cases	Characteristics of Workers
10	90.3%	9.7%	31	Age: 20-44. Relation to Head: head with other relations in household; non-relative of head without relations in household. Education: 8 or 12 years of school.
23	76.9	23.1	26	Age: 20-44. Relation to Head: head with other relations in household; non-relative of head without relations in household. Education: 0 to 7 years, 9 to 11 years, or more than 12 years of school. Job-Seeking Method: ask friends & relatives; other; no answer.
13	64.0	36.0	25	Age: 16-19; 45-64. Industry: agri., forestry, fisheries, & mining; construction; personal services, entertainment, & recreation; trans., comm., & utilities; public administration. Marital Status: married (spouse absent); divorced or widowed; never married.
8	59.3	40.7	27	Age: 20-44. Relation to Head: head without relations in household; other relative of head. Occupation: sales; clerical; service & household workers; laborers (except farm).
14	43.3	56.7	30	Age: 16-19; 45-64. Industry: mfg. durable & non-durable goods; finance, insurance, real estate, & professional; wholesale & retail trade; business & repair services; no answer. Job-Seeking Method: directly to employer; community organization; no answer.
22	38.9	61.1	36	Age: 20-44. Relation to Head: head with other relations in household; non-relative of head without relations in household. Education: 0 to 7 years,

Table 75. (Continued)

Group Number	Per Cent Unemployed		Number of Cases	Characteristics of Workers
	400 Hours or Less	More Than 400 Hours		
				9 to 11 years, or more than 12 years of school. Job-Seeking Method: state employment agency; directly to employer; newspapers.
12	38.1%	61.9%	42	Age: 16-19; 45-64. Industry: agri., forestry, fisheries, & mining; construction; personal services, entertainment, & recreation; trans., comm., & utilities; public administration. Marital Status: married (spouse present).
9	30.8	69.2	39	Age: 20-44. Relation to Head: head without relations in household; other relative of head. Occupation: professional & technical; managerial & admin.; craftsmen & foremen; all operatives; all farm workers.
15	24.3	75.7	37	Age: 16-19; 45-64. Industry: mfg. durable & non-durable goods; finance, insurance, real estate, & professional; wholesale & retail trade; business & repair services; no answer. Job-Seeking Method: state employment agency; ask friends & relatives; newspapers; other.
Total	49.1%	50.9%	293	

Table 76. Proportions Unemployed 400 Hours or Less and More Than 400 Hours, Male Workers 16-64 Years Old, Not in School or Armed Forces, Unemployed in the Last 12 Months, Chicago (Area I) Poverty Area, Final THAID Groups (Delta Criterion)

Group Number	Per Cent Unemployed 400 Hours or Less	 More Than 400 Hours	Number of Cases	Characteristics of Workers
10	77.5%	22.5%	40	Age: 20-44. Education: 9 or more years of school. Industry: agri., forestry, fisheries, & mining; finance, insurance, real estate, & professional; personal services, entertainment, & recreation; trans., comm., & utilities; business & repair services.
13	70.4	29.6	27	Age: 16-19; 45-64. Industry: mfg. durable & non-durable goods; finance, insurance, real estate & professional; wholesale & retail trade. Household Size: one or two persons in household.
22	64.7	35.3	34	Age: 20-44. Education: 9 or more years of school. Industry: mfg. durable & non-durable goods; construction; wholesale & retail trade; public administration; no answer. Family Size: two, four, seven or more family members.
8	57.7	42.3	26	Age: 20-44. Education: 8 or less years of school. Job-Seeking Method: ask friends & relatives; newspapers; no answer.
23	49.1	50.9	53	Age: 20-44. Education: 9 or more years of school. Industry: mfg. durable & non-durable goods; construction; wholesale & retail trade; public administration; no answer. Family Size: one, three, five or six family members.
12	40.5	59.5	37	Age: 16-19; 45-54. Industry: mfg. durable & non-durable goods; finance, insurance, real estate, & professional; wholesale & retail trade. Household Size: three or more persons in household.
9	32.0	68.0	25	Age: 20-44. Education: 8 or less years of school. Job-Seeking Method: state employment agency; directly to employer; union; private employment agency; community organization; other.

Table 76. (Continued)

Group Number	Per Cent Unemployed		Number of Cases	Characteristics of Workers
	400 Hours or Less	More Than 400 Hours		
7	20.0%	80.0%	30	Age: 16-19; 45-64. Industry: agri., forestry, fisheries, & mining; construction; personal services, entertainment, & recreation; trans., comm., & utilities; public administration; business & repair services.
Total	52.2%	47.8%	272	

Table 77. Proportions Unemployed 400 Hours or Less and More than 400 Hours, Male Workers 16-64 Years Old, Not in School or Armed Forces, Unemployed in the Last 12 Months, Chicago (Area II) Poverty Area, Final THAID Groups (Delta Criterion)

Group Number	Per Cent Unemployed 400 Hours or Less	Per Cent Unemployed More Than 400 Hours	Number of Cases	Characteristics of Workers
6	67.7%	32.3%	31	Where Lived at Age 16: suburbs; small city; country; farm; no answer. Family Size: one, three or five family members.
11	60.0	40.0	25	Where Lived at Age 16: this city; large city; medium city. Education: 0 to 7 years, or 12 or more years of school. Family Size: two, three, six, seven or more family members.
7	38.5	61.5	39	Where Lived at Age 16: suburbs; small city; country; farm; no answer. Family Size: two, four, six, seven or more family members.
9	28.2	71.8	39	Where Lived at Age 16: this city; large city; medium city. Education: 8 to 11 years or school. Industry: mfg. durable & non-durable goods; finance, insurance, real estate, & professional; personal services, entertainment, & recreation; public administration; business & repair services.
10	26.9	73.1	26	Where Lived at Age 16: this city; large city; medium city. Education: 0 to 7 years, or 12 or more years of school. Family Size: one, four or five family members.
8	9.4	90.6	32	Where Lived at Age 16: this city; large city; medium city. Education: 8 to 11 years of school. Industry: construction; trans., comm., & utilities; wholesale & retail trade.
Total	37.5%	62.5%	192	

Chapter 7

LABOR FORCE PARTICIPATION

Labor force participation (LFP) was selected as a dependent variable that would measure the decision and ability of poverty-area workers to spend more versus less time in the labor force, given their prior decision to participate in the labor force and their success in completing at least one week of employment during the year. Therefore, use of this variable is predicated on the assumption that a high level of LFP is necessary for breaking the bonds of poverty.

However, the LFP measure is constructed by combining two components: the number of hours that a worker was employed and unemployed during the year. One can understand how a high level of employment might eliminate a worker's poverty. On the other hand, the role of unemployment in reducing poverty is not as clear. As we have said before in this report, unemployment can be viewed as a positive effort to reduce poverty because the worker is seeking a job rather than giving up and staying out of the labor force. Yet, a long period of unemployment obviously can create or continue impoverishment because the worker is not earning income from a job.

In our separate analyses of income, employment, and of unemployment we found some evidence that the socioeconomic characteristics that produce high income and employment levels are also those that lead to low unemployment levels. It appears that in our samples employment and unemployment have an opposite relationship with poverty, and that they should not be combined into one measure. In other words, apparently LFP is not a very useful measure for the type of sample and frame of reference that we have in this study. Indeed, analysis of the LFP data supports our contention, for we find that the general effect of adding hours of unemployment to hours of employment is to produce a weaker version of the employment results that we reported in Chapter 5.

Therefore, while all of the LFP findings have been included in this chapter, we are not going to describe and discuss them, for they reveal no additional information of importance. The MCA and AID summary statistics are presented in Tables 78, 79, 80, and 81. The detailed MCA findings are shown in Tables 82 to 97. The AID models are shown in Figures 13, 14, 15, and 16. Tables 98, 99, 100, and 101 present the final AID groups in rank order according to mean hours in the labor force.

Table 78. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, St. Louis Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	AID $Beta^2$
Race	.000	.000	.000
Ethnicity	.001	.000	.000
Where Lived at Age 16	.006	.005	.000
Education	.005	.007	.007
Job Training	.000	.000	.000
Veteran Status	.007	.000	.000
Age	.064	.045	.057
Marital Status	.037	.034	.009
Relation to Head	.034	.023	.000
Family Size	.007	.007	.007
Household Size	.006	.013	.000
Years at Present Address	.005	.002	.017
Job-Seeking Method	.032	.024	.014
Health Problem	.018	.022	.024
Age Problem	.001	.000	.000
Lack Skill, Exp., or Ed.	.003	.009	.000
Occupation	.013	.012	.000
Industry	.023	.021	.043
Class of Worker	.010	.005	.000

MCA R^2 = .130

MCA R (adj.) = .360

AID R^2 = .177

Table 79. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, San Antonio Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	AID $Beta^2$
Race	.001	.001	.000
Ethnicity	.000	.002	.000
Where Lived at Age 16	.002	.002	.000
Education	.002	.002	.000
Job Training	.003	.000	.000
Veteran Status	.008	.002	.000
Age	.065	.044	.063
Marital Status	.029	.011	.014
Relation to Head	.026	.008	.000
Family Size	.007	.025	.000
Household Size	.001	.012	.000
Years at Present Address	.006	.003	.000
Job-Seeking Method	.033	.009	.010
Health Problem	.086	.082	.087
Age Problem	.010	.002	.000
Lack Skill, Exp., or Ed.	.000	.001	.000
Occupation	.022	.007	.034
Industry	.038	.008	.019
Class of Worker	.021	.008	.000

MCA R^2 = .183

MCA R (adj.) = .428

AID R^2 = .227

Table 80. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, Chicago (Area I) Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	AID $Beta^2$
Race	.002	.004	.000
Ethnicity	.000	.000	.000
Where Lived at Age 16	.004	.003	.009
Education	.013	.006	.007
Job Training	.000	.000	.000
Veteran Status	.000	.001	.000
Age	.029	.011	.000
Marital Status	.055	.005	.000
Relation to Head	.096	.178	.061
Family Size	.033	.099	.009
Household Size	.026	.021	.022
Years at Present Address	.024	.003	.000
Job-Seeking Method	.099	.039	.087
Health Problem	.072	.045	.035
Age Problem	.004	.001	.000
Lack Skill, Exp., or Ed.	.002	.002	.000
Occupation	.028	.016	.041
Industry	.031	.020	.027
Class of Worker	.002	.001	.000

MCA R^2 = .228

MCA R (adj.) = .478

AID R^2 = .299

Table 81. MCA and AID Summary Statistics for 19 Predictors of Annual Hours in the Labor Force, Male Workers 16 to 64 Years Old, Not in School or Armed Forces, Chicago (Area II) Poverty Area

Variable	MCA Eta^2	MCA $Beta^2$	AID $Beta^2$
Race	.003	.001	.000
Ethnicity	.001	.000	.000
Where Lived at Age 16	.005	.005	.000
Education	.010	.006	.000
Job Training	.003	.001	.000
Veteran Status	.001	.000	.000
Age	.026	.012	.013
Marital Status	.014	.013	.000
Relation to Head	.016	.013	.008
Family Size	.003	.004	.016
Household Size	.001	.001	.000
Years at Present Address	.005	.002	.000
Job-Seeking Method	.061	.046	.048
Health Problem	.046	.040	.040
Age Problem	.000	.000	.000
Lack Skill, Exp., or Ed.	.001	.006	.000
Occupation	.009	.009	.007
Industry	.021	.013	.022
Class of Worker	.016	.014	.000

MCA R^2 = .134

MCA R (adj.) = .365

AID R^2 = .154

Table 82. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

Characteristic	Grand Mean = 1,875 Hours		
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Race			
White	-3	-2	435
Negro	1	1	893
Other	23	22	5
Ethnicity			
Spanish origin	-105	-57	17
Non-Spanish origin	1	1	1,316
Where Lived at Age 16			
This city	-11	11	663
Suburb	-187	-149	20
Large city	-24	-63	63
Medium city	24	19	52
Small city	25	12	250
Country	0	-63	39
Farm	34	-1	157
No answer	-5	-16	89
Education			
7 years or less	-17	-18	253
8 years	-23	-35	236
9 to 11 years	-9	13	383
12 years	37	32	304
13 years or more	17	-5	155
Job Training			
Yes	-9	-5	377
No	4	2	956
Veteran Status			
Veteran	35	5	609
Non-Veteran	-30	-4	724

Table 83. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = 1,913 Hours Deviation from Grand Mean (Hours)	 Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Race			
White	-3	-3	1,747
Negro	17	23	238
Other	127	60	3
Ethnicity			
Spanish origin	1	9	1,549
Non-Spanish origin	-4	-31	439
Where Lived at Age 16			
This city	-6	-2	1,177
Suburb	123	104	17
Large city	23	9	80
Medium city	5	-3	105
Small city	5	-10	416
Country	-56	-40	17
Farm	28	40	98
No answer	-19	6	78
Education			
7 years or less	-17	-10	716
8 years	-11	-19	191
9 to 11 years	5	13	405
12 years	20	22	464
13 years or more	12	-21	204
Job Training			
Yes	30	10	639
No	-14	-5	1,349
Veteran Status			
Veteran	35	-17	814
Non-Veteran	-24	12	1,174

Table 84. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

Characteristic	Grand Mean = 1,883 Hours Deviation from Grand Mean (Hours)	Grand Mean = 1,883 Hours Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Race			
White	-9	-19	971
Negro	7	22	625
Other	64	65	69
Ethnicity			
Spanish origin	4	-6	406
Non-Spanish origin	-1	2	1,259
Where Lived at Age 16			
This city	2	5	547
Suburb	6	-5	30
Large city	-43	-30	197
Medium city	-1	19	109
Small city	30	18	476
Country	-14	-69	43
Farm	-22	-32	149
No answer	-25	2	114
Education			
7 years or less	-57	-43	313
8 years	59	48	293
9 to 11 years	-18	-8	462
12 years	16	14	367
13 years or more	18	-6	229
Job Training			
Yes	-14	-12	380
No	4	4	1,285
Veteran Status			
Veteran	2	-19	518
Non-Veteran	-1	9	1,147

Table 85. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

Characteristic	Grand Mean = 1,913 Hours Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Race			
White	47	24	212
Negro	-9	-4	1,200
Other	31	8	33
Ethnicity			
Spanish origin	43	16	71
Non-Spanish origin	-2	-1	1,374
Where Lived at Age 16			
This city	0	7	574
Suburb	15	-59	15
Large city	-34	-35	96
Medium city	45	59	117
Small city	21	4	294
Country	52	12	33
Farm	-40	-39	187
No answer	-22	-9	129
Education			
7 years or less	-45	-21	209
8 years	32	10	209
9 to 11 years	-29	-19	442
12 years	43	40	381
13 years or more	-5	-22	202
Job Training			
Yes	-33	-24	318
No	9	7	1,127
Veteran Status			
Veteran	15	-8	598
Non-Veteran	-10	6	847

Table 86. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

Characteristic	Grand Mean = 1,875 Hours Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Age			
16 to 19 years	-343	-289	87
20 to 24 years	-14	-2	132
25 to 34 years	39	23	284
35 to 44 years	42	45	297
45 to 54 years	55	40	276
55 to 59 years	-8	6	132
60 to 64 years	-49	-50	125
Marital Status			
Married, spouse present	52	52	857
Married, spouse absent	-67	-86	127
Divorced or widowed	-42	-88	107
Never married	-131	-100	242
Relation to Head			
Head with other relations in household	44	-32	901
Head without relations in household	-29	141	164
Non-relative of head, with own relations in household	185	270	2
Non-relative of head, without relations in household	-96	39	42
Other relative of head	-139	15	224
Family Size			
1 person	-43	-4	206
2 persons	24	-32	282
3 persons	11	24	231
4 persons	22	21	176
5 persons	35	39	103
6 persons	-67	-65	122
7 persons or more	1	22	213

Table 87. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = 1,913 Hours		
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Age			
16 to 19 years	-268	-224	146
20 to 24 years	-37	-36	244
25 to 34 years	57	39	405
35 to 44 years	46	28	415
45 to 54 years	37	44	458
55 to 59 years	3	7	177
60 to 64 years	-79	-49	143
Marital Status			
Married, spouse present	32	21	1,424
Married, spouse absent	-60	-61	99
Divorced or widowed	12	-16	104
Never married	-114	-61	361
Relation to Head			
Head with other relations in household	32	-14	1,436
Head without relations in household	-18	97	123
Non-relative of head, with own relations in household	127	379	1
Non-relative of head, without relations in household	-135	-18	44
Other relative of head	-97	24	384
Family Size			
1 person	-48	-144	168
2 persons	-12	-38	309
3 persons	48	68	321
4 persons	9	5	299
5 persons	-2	12	289
6 persons	23	31	200
7 persons or more	-26	8	402

Table 88. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

	Grand Mean = 1,883 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Age			
16 to 19 years	-217	-113	77
20 to 24 years	-68	-35	229
25 to 34 years	34	14	450
35 to 44 years	15	5	346
45 to 54 years	43	43	365
55 to 59 years	32	-12	128
60 to 64 years	-116	-83	70
Marital Status			
Married, spouse present	75	15	978
Married, spouse absent	-124	-62	167
Divorced or widowed	-100	-54	107
Never married	-101	4	413
Relation to Head			
Head with other relations in household	76	-53	1,048
Head without relations in household	-40	335	277
Non-relative of head, with own relations in household	40	60	7
Non-relative of head, without relations in household	-338	59	108
Other relative of head	-143	-197	225
Family Size			
1 person	-125	-216	386
2 persons	37	80	289
3 persons	38	72	266
4 persons	55	60	242
5 persons	56	60	176
6 persons	-8	12	114
7 persons or more	26	77	192

Table 89. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

	Grand Mean = 1,913 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Age			
16 to 19 years	-260	-143	49
20 to 24 years	-61	-59	153
25 to 34 years	27	27	313
35 to 44 years	14	7	298
45 to 54 years	24	15	377
55 to 59 years	30	26	141
60 to 64 years	-31	-33	114
Marital Status			
Married, spouse present	31	30	882
Married, spouse absent	-15	-29	182
Divorced or widowed	-53	-76	111
Never married	-70	-49	270
Relation to Head			
Head with other relations in household	27	-17	920
Head without relations in household	-25	68	230
Non-relative of head, with own relations in household	127	-57	4
Non-relative of head, without relations in household	-6	89	86
Other relative of head	-96	-38	205
Family Size			
1 person	-19	-19	316
2 persons	2	3	298
3 persons	37	19	240
4 persons	-14	-26	174
5 persons	-8	-5	150
6 persons	-25	-18	99
7 persons or more	17	43	168

Table 90. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

	Grand Mean = 1,875 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	-57	-93	153
2 persons	38	59	306
3 persons or more	-2	-3	865
Years at Present Address			
1 year or less	-40	-24	419
2 to 5 years	20	13	387
6 to 10 years	16	-7	230
11 to 20 years	27	25	225
21 years or more	-6	12	72
Job-Seeking Method			
State employment service	13	98	25
Directly to employer	-83	-76	83
Asked friends or relatives	-175	-142	59
Newspapers	-63	-87	8
Union	2	-21	11
Private employment agency	-113	-128	9
Community organizations	-137	-72	9
All other methods	-240	-218	19
Did not look in past 12 months	37	29	989
No answer	-100	-80	121
Health Problem			
Yes	-187	-204	97
No	15	16	1,236
Age Problem			
Yes	-68	13	54
No	3	-1	1,279
Lack Skill, Experience or Education			
Yes	38	69	273
No	-10	-18	1,060

Table 91. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = 1,913 Hours Deviation from Grand Mean (Hours)	Grand Mean = 1,913 Hours Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	6	108	121
2 persons	-13	45	328
3 persons or more	3	-18	1,533
Years at Present Address			
1 year or less	-21	-2	516
2 to 5 years	9	-14	448
6 to 10 years	39	27	330
11 to 20 years	-29	-20	450
21 years or more	28	28	244
Job-Seeking Method			
State employment service	-120	4	32
Directly to employer	-100	-43	197
Asked friends or relatives	-80	-7	140
Newspapers	1	42	30
Union	-7	-45	9
Private employment agency	101	78	6
Community organizations	-343	-278	12
All other methods	-174	-108	32
Did not look in past 12 months	32	11	1,492
No answer	-86	-29	38
Health Problem			
Yes	-281	-273	218
No	35	34	1,770
Age Problem			
Yes	-158	-63	91
No	8	3	1,897
Lack Skill, Experience or Education			
Yes	-7	17	546
No	3	-6	1,442

Table 92. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

Characteristic	Grand Mean = 1,883 Hours Deviation from Grand Mean (Hours)	Grand Mean = 1,883 Hours Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	-129	-119	295
2 persons	27	14	324
3 persons or more	29	30	1,041
Years at Present Address			
1 year or less	-75	-27	640
2 to 5 years	44	9	509
6 to 10 years	33	21	261
11 to 20 years	60	22	181
21 years or more	80	41	74
Job-Seeking Method			
State employment service	2	65	7
Directly to employer	-191	-137	146
Asked friends or relatives	-163	-112	90
Newspapers	-43	-56	16
Union	157	151	4
Private employment agency	-177	-91	13
Community organizations	-525	-249	17
All other methods	-354	-109	20
Did not look in past 12 months	67	43	1,218
No answer	-156	-113	134
Health Problem			
Yes	-346	-271	135
No	31	24	1,530
Age Problem			
Yes	-113	47	81
No	6	-2	1,584
Lack Skill, Experience or Education			
Yes	-36	30	341
No	9	-8	1,324

323

Table 93. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

	Grand Mean = 1,913 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Household Size			
1 person	-24	-12	209
2 persons	-5	3	323
3 persons or more	7	1	908
Years at Present Address			
1 year or less	-24	-9	408
2 to 5 years	-14	-12	465
6 to 10 years	41	30	267
11 to 20 years	9	2	224
21 years or more	40	10	81
Job-Seeking Method			
State employment service	50	82	11
Directly to employer	-120	-71	75
Asked friends or relatives	-93	-54	59
Newspapers	104	67	12
Union	-156	-174	12
Private employment agency	167	318	4
Community organizations	-566	-590	3
All other methods	-723	-673	4
Did not look in past 12 months	36	27	1,144
No answer	-186	-157	121
Health Problem			
Yes	-262	-241	111
No	22	20	1,334
Age Problem			
Yes	-13	9	36
No	0	-0	1,409
Lack Skill, Experience or Education			
Yes	25	57	273
No	-6	-13	1,172

Table 94. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

Characteristic	Grand Mean = 1,875 Hours Deviation from Grand Mean (Hours)	Grand Mean = 1,875 Hours Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Occupation			
Professional and technical	-39	37	71
Managerial and administrative	116	105	44
Sales	-21	-63	24
Clerical	35	16	124
Craftsmen and foremen	25	24	224
Operatives, except transportation	33	2	315
Transport equipment operatives	-27	-41	131
Laborers, except farm	-45	-38	162
Service, except private household	-50	-16	233
Private household workers	-192	-46	2
All farm workers	205	577	3
Industry			
Agriculture, forestry and fisheries	-85	-258	8
Mining	165	252	1
Construction	-62	-51	79
Durable goods manufacturing	29	22	369
Nondurable goods manufacturing	86	73	184
Transportation, communication and utilities	-45	-54	148
Wholesale and retail trade	-7	39	200
Finance, insurance and real estate	-100	-69	34
Business and repair services	-60	-28	56
Personal services	-35	-23	35
Entertainment and recreation	-61	-13	8
Professional services	-64	-50	127
Public administration	64	-35	80
Class of Worker			
Private	-1	-3	1,090
Government	50	45	178
Self-employed	-104	-82	60
Without pay in family business	-549	-359	1

Table 95. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

Characteristic	Grand Mean = 1,913 Hours		Number of Cases
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	
Occupation			
Professional and technical	39	19	120
Managerial and administrative	59	61	122
Sales	6	28	51
Clerical	31	-16	190
Craftsmen and foremen	30	16	500
Operatives, except transportation	5	10	272
Transport equipment operatives	7	-13	190
Laborers, except farm	-95	-44	247
Service, except private household	-27	-16	274
Private household workers	127	238	1
All farm workers	-231	-70	21
Industry			
Agriculture, forestry and fisheries	-247	-74	29
Mining	137	103	4
Construction	-80	-52	239
Durable goods manufacturing	8	-2	149
Nondurable goods manufacturing	13	21	149
Transportation, communication and utilities	49	24	121
Wholesale and retail trade	-29	-8	444
Finance, insurance and real estate	48	25	48
Business and repair services	26	33	117
Personal services	-109	-37	100
Entertainment and recreation	-53	12	20
Professional services	28	30	163
Public administration	84	17	397
Class of Worker			
Private	-25	-11	1,292
Government	74	38	563
Self-employed	-58	-72	122
Without pay in family business	-263	51	3

Table 96. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area (1,665 Workers)

Characteristic	Grand Mean = 1,883 Hours		Number of Cases
	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	
Occupation			
Professional and technical	29	39	101
Managerial and administrative	36	41	68
Sales	15	-26	21
Clerical	38	33	173
Craftsmen and foremen	72	63	285
Operatives, except transportation	4	-32	514
Transport equipment operatives	45	-17	122
Laborers, except farm	-128	-76	169
Service, except private household	-80	2	203
Private household workers	-430	-271	3
All farm workers	-158	296	6
Industry			
Agriculture, forestry and fisheries	-171	-130	10
Mining	157	277	1
Construction	-117	-133	80
Durable goods manufacturing	41	37	556
Nondurable goods manufacturing	48	27	227
Transportation, communication and utilities	52	49	156
Wholesale and retail trade	-3	-26	249
Finance, insurance and real estate	19	34	48
Business and repair services	-126	-103	89
Personal services	-183	-91	54
Entertainment and recreation	-134	-106	7
Professional services	-77	-25	131
Public administration	23	15	56
Class of Worker			
Private	-2	1	1,489
Government	21	-5	128
Self-employed	20	-18	46
Without pay in family business	-603	-322	1

Table 97. Relationship Between Annual Hours in the Labor Force and Socioeconomic Characteristics of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)

	Grand Mean = 1,913 Hours		
Characteristic	Deviation from Grand Mean (Hours)	Adjusted Deviation from Grand Mean (Hours)	Number of Cases
Occupation			
Professional and technical	-75	-18	79
Managerial and administrative	38	68	51
Sales	135	143	20
Clerical	28	-17	162
Craftsmen and foremen	7	21	227
Operatives, except transportation	12	9	311
Transport equipment operatives	27	26	153
Laborers, except farm	-35	-22	187
Service, except private household	-26	-39	253
Private household workers	127	250	2
All farm workers	--	--	--
Industry			
Agriculture, forestry and fisheries	127	57	3
Mining	127	-39	1
Construction	-108	-82	112
Durable goods manufacturing	11	16	299
Nondurable goods manufacturing	24	9	221
Transportation, communication and utilities	-5	-11	175
Wholesale and retail trade	-12	-10	243
Finance, insurance and real estate	63	75	42
Business and repair services	27	40	59
Personal services	14	24	57
Entertainment and recreation	-345	-299	5
Professional services	-39	-24	115
Public administration	92	53	105
Class of Worker			
Private	-1	2	1,179
Government	54	29	208
Self-employed	-196	-207	48
Without pay in family business	127	83	2

Figure 13. Annual Hours in the Labor Force, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area (1,333 Workers)

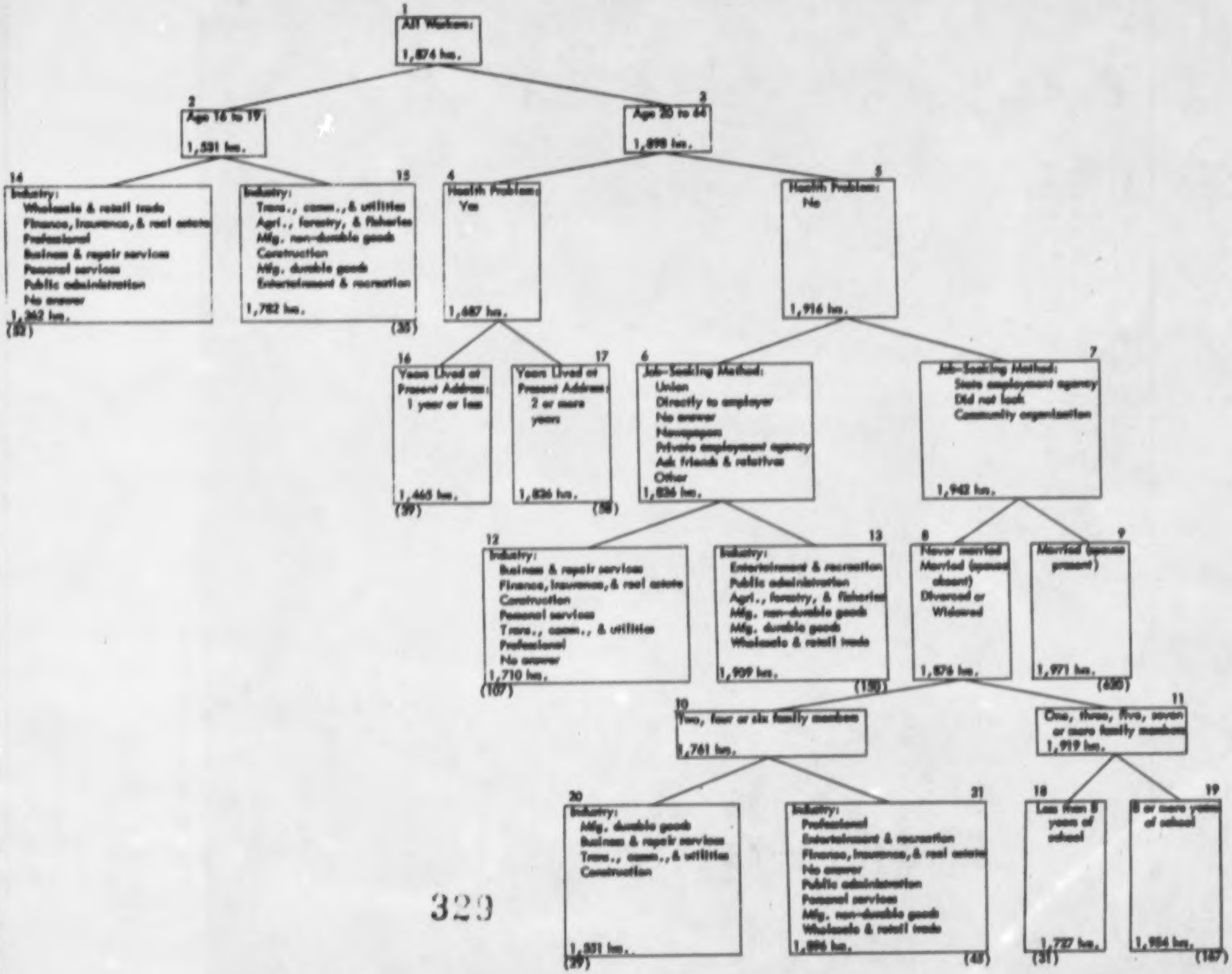

1
All Workers:
1,874 hrs.
2
Age 16 to 19
1,531 hrs.
3
Age 20 to 64
1,898 hrs.
14
Industry:
Wholesale & retail trade
Finance, insurance, & real estate
Professional
Business & repair services
Personal services
Public administration
No answer
1,262 hrs.
(32)
15
Industry:
Trans., comm., & utilities
Agri., forestry, & fisheries
Mfg. non-durable goods
Construction
Mfg. durable goods
Entertainment & recreation
1,782 hrs.
(35)
4
Health Problem:
Yes
1,687 hrs.
5
Health Problem:
No
1,916 hrs.
16
Years Lived at Present Address:
1 year or less
1,465 hrs.
(39)
17
Years Lived at Present Address:
2 or more years
1,836 hrs.
(58)
6
Job-Seeking Method:
Union
Directly to employer
No answer
Newspaper
Private employment agency
Ask friends & relatives
Other
1,836 hrs.
7
Job-Seeking Method:
State employment agency
Did not look
Community organization
1,942 hrs.
12
Industry:
Business & repair services
Finance, insurance, & real estate
Construction
Personal services
Trans., comm., & utilities
Professional
No answer
1,710 hrs.
(107)
13
Industry:
Entertainment & recreation
Public administration
Agri., forestry, & fisheries
Mfg. non-durable goods
Mfg. durable goods
Wholesale & retail trade
1,939 hrs.
(130)
8
Never married
Married (spouse absent)
Divorced or Widowed
1,876 hrs.
9
Married (spouse present)
1,971 hrs.
(630)
10
Two, four or six family members
1,761 hrs.
11
One, three, five, seven or more family members
1,919 hrs.
20
Industry:
Mfg. durable goods
Business & repair services
Trans., comm., & utilities
Construction
1,531 hrs.
(29)
21
Industry:
Professional
Entertainment & recreation
Finance, insurance, & real estate
No answer
Public administration
Personal services
Mfg. non-durable goods
Wholesale & retail trade
1,886 hrs.
(43)
18
Less than 8 years of school
1,727 hrs.
(31)
19
8 or more years of school
1,954 hrs.
(147)

Figure 14. Annual Hours in the Labor Force, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area (1,988 Workers)

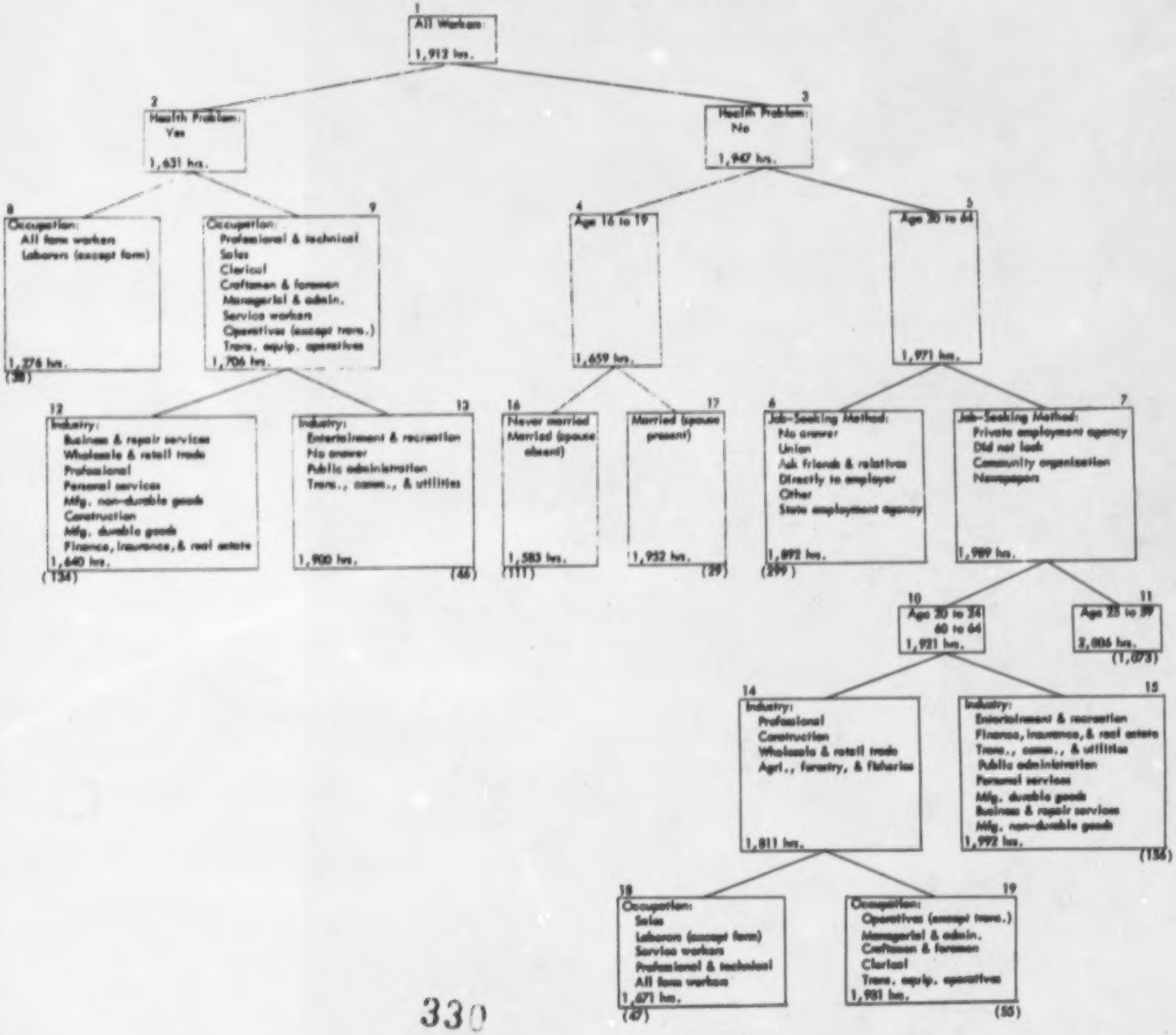
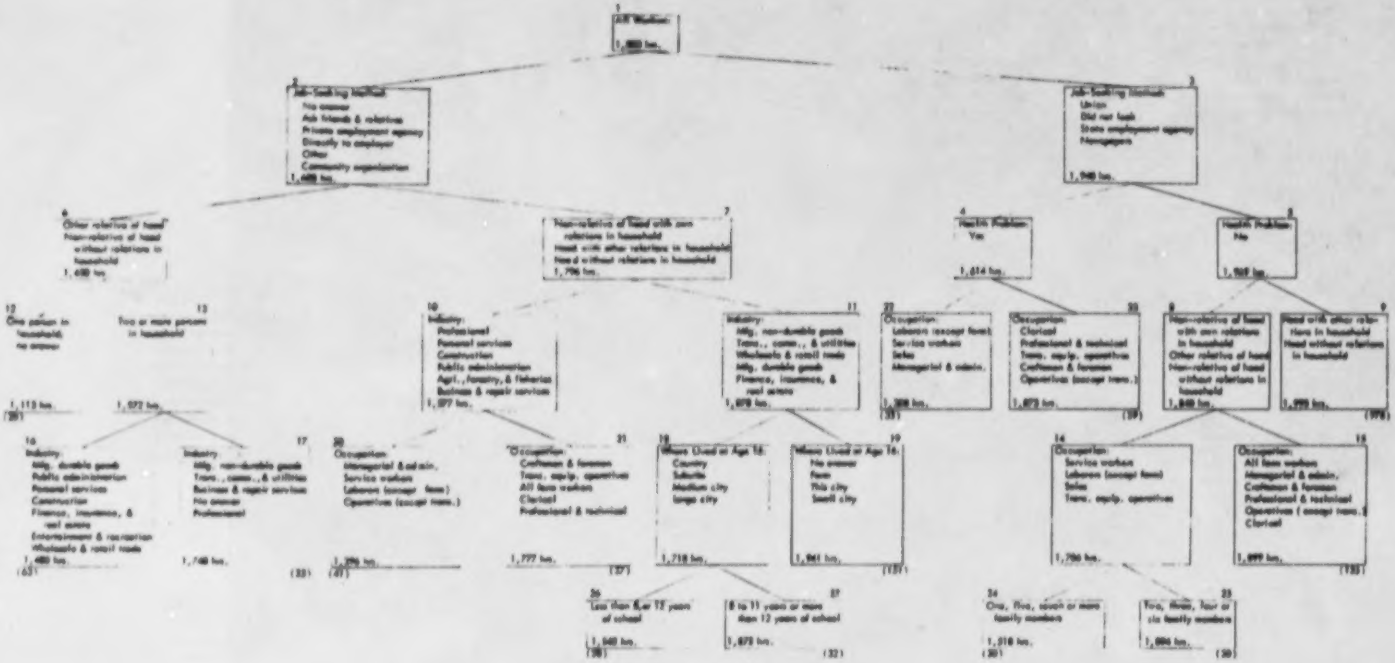
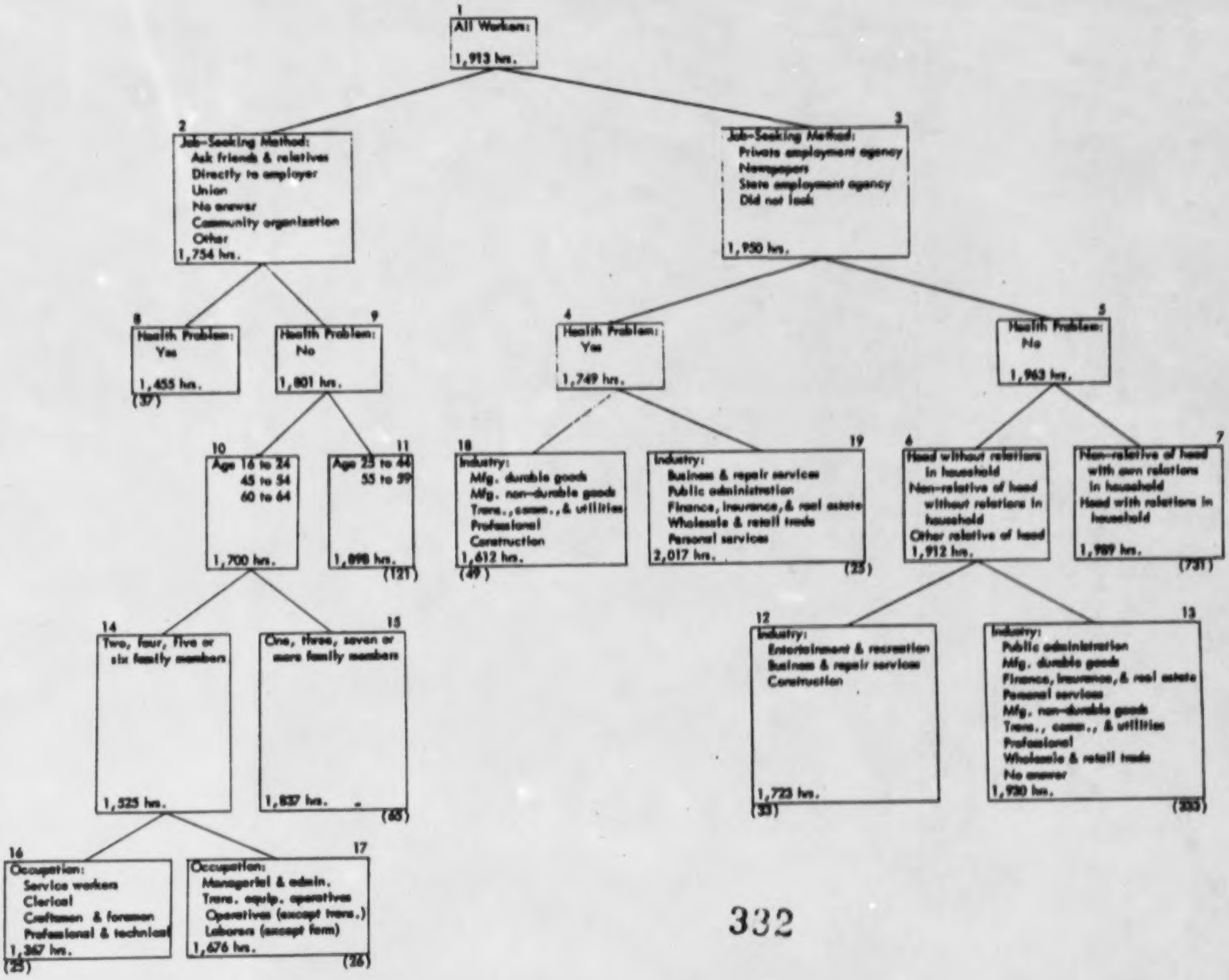

1
All Workers:
1,912 hrs.
2
Health Problem:
Yes
1,631 hrs.
3
Health Problem:
No
1,947 hrs.
8
Occupation:
All farm workers
Laborers (except farm)
1,276 hrs.
(38)
9
Occupation:
Professional & technical
Sales
Clerical
Craftsmen & foremen
Managerial & admin.
Service workers
Operatives (except trans.)
Trans. equip. operatives
1,706 hrs.
4
Age 16 to 19
1,659 hrs.
5
Age 20 to 64
1,971 hrs.
12
Industry:
Business & repair services
Wholesale & retail trade
Professional
Personal services
Mfg. non-durable goods
Construction
Mfg. durable goods
Finance, insurance, & real estate
1,640 hrs.
(134)
13
Industry:
Entertainment & recreation
No answer
Public administration
Trans., comm., & utilities
1,900 hrs.
(46)
16
Never married
Married (spouse absent)
1,583 hrs.
(111)
17
Married (spouse present)
1,952 hrs.
(29)
6
Job-Seeking Method:
No answer
Union
Ask friends & relatives
Directly to employer
Other
State employment agency
1,892 hrs.
(299)
7
Job-Seeking Method:
Private employment agency
Did not look
Community organization
Newspapers
1,989 hrs.
10
Age 20 to 24
60 to 64
1,921 hrs.
11
Age 25 to 59
2,006 hrs.
(1,073)
14
Industry:
Professional
Construction
Wholesale & retail trade
Agri., forestry, & fisheries
1,811 hrs.
15
Industry:
Entertainment & recreation
Finance, insurance, & real estate
Trans., comm., & utilities
Public administration
Personal services
Mfg. durable goods
Business & repair services
Mfg. non-durable goods
1,992 hrs.
(136)
18
Occupation:
Sales
Laborers (except farm)
Service workers
Professional & technical
All farm workers
1,671 hrs.
(47)
19
Occupation:
Operatives (except trans.)
Managerial & admin.
Craftsmen & foremen
Clerical
Trans. equip. operatives
1,931 hrs.
(55)

Figure 11. Annual Hours in the Labor Force, by Groups of Male Workers, 16 to 64 Years Old, Not in School or Armed Forces, in Last 12 Months, Chicago (Area 1) Poverty Area (1,460 Workers)


1
All Workers:
2
Job-Seeking Method:
No answer
Ask friends & relatives
Private employment agency
Directly to employer
Other
Community organization
3
Job-Seeking Method:
Union
Did not look
State employment agency
Newspapers
1,948 hrs.
4
Health Problem:
Yes
1,614 hrs.
5
Health Problem:
No
1,969 hrs.
6
Other relative of head
Non-relative of head without relatives in household
1,630 hrs.
7
Non-relative of head with own relatives in household
Head with other relatives in household
Head without relatives in household
1,796 hrs.
8
Non-relative of head with own relatives in household
Other relative of head
Non-relative of head without relatives in household
1,849 hrs.
9
Head with other relatives in household
Head without relatives in household
1,999 hrs.
(978)
10
Industry:
Professional
Personal services
Construction
Public administration
Agri., forestry, & fisheries
Business & repair services
1,577 hrs.
11
Industry:
Mfg. non-durable goods
Trans., comm., & utilities
Wholesale & retail trade
Mfg. durable goods
Finance, insurance, & real estate
1,878 hrs.
12
One person in household, no answer
1,113 hrs.
(29)
13
Two or more persons in household
1,572 hrs.
14
Occupation:
Service workers
Laborers (except farm)
Sales
Trans. equip. operatives
1,786 hrs.
15
Occupation:
All farm workers
Managerial & admin.
Craftsmen & foremen
Professional & technical
Operatives (except trans.)
Clerical
1,899 hrs.
(135)
16
Industry:
Mfg. durable goods
Public administration
Personal services
Construction
Finance, insurance, & real estate
Entertainment & recreation
Wholesale & retail trade
1,480 hrs.
(63)
17
Industry:
Mfg. non-durable goods
Trans., comm., & utilities
Business & repair services
No answer
Professional
1,748 hrs.
(33)
18
Where Lived at Age 16:
Country
Suburbs
Medium city
Large city
1,718 hrs.
19
Where Lived at Age 16:
No answer
Farm
This city
Small city
1,961 hrs.
(131)
20
Occupation:
Managerial & admin.
Service workers
Laborers (except farm)
Operatives (except trans.)
1,296 hrs.
(41)
21
Occupation:
Craftsmen & foremen
Trans. equip. operatives
All farm workers
Clerical
Professional & technical
1,777 hrs.
(37)
22
Occupation:
Laborers (except farm)
Service workers
Sales
Managerial & admin.
1,308 hrs.
(33)
23
Occupation:
Clerical
Professional & technical
Trans. equip. operatives
Craftsmen & foremen
Operatives (except trans.)
1,873 hrs.
(39)
24
One, five, seven or more family members
1,518 hrs.
(30)
25
Two, three, four or six family members
1,886 hrs.
(30)
26
Less than 8 or 12 years of school
1,540 hrs.
(38)
27
8 to 11 years or more than 12 years of school
1,873 hrs.
(32)

BEST COPY AVAILABLE

Figure 16. Annual Hours in the Labor Force, by Groups of Male Workers, 16 to 64 Years Old, Not In School or Armed Forces In Last 12 Months, Chicago (Area II) Poverty Area (1,445 Workers)



1
All Workers:
1,913 hrs.
2
Job-Seeking Method:
Ask friends & relatives
Directly to employer
Union
No answer
Community organization
Other
1,754 hrs.
3
Job-Seeking Method:
Private employment agency
Newspapers
State employment agency
Did not look
1,950 hrs.
8
Health Problem:
Yes
1,455 hrs.
(37)
9
Health Problem:
No
1,801 hrs.
4
Health Problem:
Yes
1,749 hrs.
5
Health Problem:
No
1,963 hrs.
10
Age 16 to 24
45 to 54
60 to 64
1,700 hrs.
11
Age 25 to 44
55 to 59
1,898 hrs.
(121)
18
Industry:
Mfg. durable goods
Mfg. non-durable goods
Trans., comm., & utilities
Professional
Construction
1,612 hrs.
(49)
19
Industry:
Business & repair services
Public administration
Finance, insurance, & real estate
Wholesale & retail trade
Personal services
2,017 hrs.
(25)
6
Head without relatives in household
Non-relative of head without relatives in household
Other relative of head
1,912 hrs.
7
Non-relative of head with own relations in household
Head with relatives in household
1,989 hrs.
(731)
14
Two, four, five or six family members
1,525 hrs.
15
One, three, seven or more family members
1,837 hrs.
(65)
12
Industry:
Entertainment & recreation
Business & repair services
Construction
1,723 hrs.
(33)
13
Industry:
Public administration
Mfg. durable goods
Finance, insurance, & real estate
Personal services
Mfg. non-durable goods
Trans., comm., & utilities
Professional
Wholesale & retail trade
No answer
1,930 hrs.
(333)
16
Occupation:
Service workers
Clerical
Craftsmen & foremen
Professional & technical
1,367 hrs.
(25)
17
Occupation:
Managerial & admin.
Trans. equip. operatives
Operatives (except trans.)
Laborers (except farm)
1,676 hrs.
(26)

Table 98. Annual Hours in the Labor Force of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, St. Louis Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
9	1,971	233	620	Age: 20-64. Health Problem: no. Job-Seeking Method: state employment agency; did not look; community organization. Marital Status: married (spouse present).
19	1,954	246	167	Age: 20-64. Health Problem: no. Job-Seeking Method: state employment agency; did not look; community organization. Marital Status: never married; married (spouse absent); divorced or widowed. Family Size: one, three, five, seven or more family members. Education: 8 or more years of school.
13	1,909	981	150	Age: 20-64. Health Problem: no. Job-Seeking Method: union; directly to employer; no answer; newspapers; private employment agency; ask friends & relatives; other. Industry: entertainment & recreation; public administration; agri., forestry & fisheries; mfg. non-durable goods; mfg. durable goods; wholesale & retail trade.
21	1,896	364	45	Age: 20-64. Health Problem: no. Job-Seeking Method: state employment agency; did not look; community organization. Marital Status: never married; married (spouse absent); divorced or widowed. Family Size: two, four or six family members. Industry: professional; entertainment & recreation; finance, insurance, & real estate; no answer; public administration; personal services; mfg. non-durable goods; wholesale & retail trade.
17	1,836	376	58	Age: 20-64. Health Problem: yes. Years at Present Address: 2 or more years.
15	1,782	440	35	Age: 16-19. Industry: trans., comm., & utilities; agri., forestry, & fisheries; mfg. non-durable goods; construction; mfg. durable goods; entertainment & recreation.

Table 98. (Continued)

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
18	1,727	553	31	Age: 20-64. Health Problem: no. Job-Seeking Method: state employment agency; did not look; community organization. Marital Status: never married; married (spouse absent); divorced or widowed. Family Size: one, three, five, seven or more family members. Education: less than 8 years of school.
12	1,710	485	107	Age: 20-64. Health Problem: no. Job-Seeking Method: union; directly to employer; no answer; newspapers; private employment agency; ask friends & relatives; other. Industry: business & repair services; finance, insurance, & real estate; construction; personal services; trans., comm., & utilities; professional; no answer.
20	1,551	660	29	Age: 20-64. Health Problem: no. Job-Seeking Method: state employment agency; did not look; community organization. Marital Status: never married; married (spouse absent); divorced or widowed. Family Size: two, four or six family members. Industry: mfg. durable goods; business & repair services; trans., comm., & utilities; construction.
16	1,465	653	39	Age: 20-64. Health Problem: yes. Years at Present Address: 1 year or less.
14	1,362	595	52	Age: 16-19. Industry: wholesale & retail trade; finance, insurance, & real estate; professional; business & repair services; personal services; public administration; no answer.
Total	1,874	381	1,333	

Table 99. Annual Hours in the Labor Force of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, San Antonio Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
11	2,006	170	1,073	Health Problem: no. Job-Seeking Method: private employment agency; did not look; community organization; newspapers. Age: 25-59.
15	1,992	176	156	Health Problem: no. Job-Seeking Method: private employment agency; did not look; community organization; newspapers. Age: 20-24; 60-64. Industry: entertainment & recreation; finance, insurance, & real estate; trans., comm., & utilities; public administration; personal services; mfg. durable goods; business & repair services; mfg. non-durable goods.
17	1,952	243	29	Health Problem: no. Age: 16-19. Marital Status: married (spouse present).
19	1,931	264	55	Health Problem: no. Job-Seeking Method: private employment agency; did not look; community organization; newspapers. Age: 20-24; 60-64. Industry: professional; construction; wholesale & retail trade; agri., forestry, & fisheries. Occupation: operatives (except trans.); managerial & admin.; craftsmen & foremen; clerical; trans. equipment operatives.
13	1,900	366	46	Health Problem: yes. Occupation: professional & technical; sales; clerical; craftsmen & foremen; managerial & admin.; services workers; operatives (except trans.); trans. equipment operatives. Industry: entertainment & recreation; no answer; public administration; trans., comm., & utilities.
6	1,892	333	299	Health Problem: no. Age: 20-64. Job-Seeking Method: no answer; union; ask friends & relatives; directly to employer; other; state employment agency.

Table 99. (Continued)

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
18	1,671	625	47	Health Problem: no. Job-Seeking Method: private employment agency; did not look; community organization; newspapers. Age: 20-24; 60-64. Industry: professional; construction; wholesale & retail trade; agri., forestry, & fisheries. Occupation: sales; laborers (except farm); service workers; professional & technical; all farm workers.
12	1,640	509	134	Health Problem: yes. Occupation: professional & technical; sales; clerical; craftsmen & foremen; managerial & admin., service workers; operatives (except trans.); trans. equipment operatives. Industry: business & repair services; wholesale & retail trade; professional; personal services; mfg. non-durable goods; construction; mfg. durable goods; finance, insurance, & real estate.
16	1,583	446	111	Health Problem: no. Age: 16-19. Marital Status: never married; married (spouse absent).
8	1,276	690	38	Health Problem: yes. Occupation: all farm workers; laborers (except farm).
Total	1,912	335	1,988	

Table 100. Annual Hours in the Labor Force of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area I) Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
9	1,995	633	978	Job-Seeking Method: union; did not look; state employment agency; newspapers. Health Problem: no. Relation to Head: head with other relations in household; head without relations in household.
19	1,941	258	151	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Industry: mfg. non-durable goods; trans., comm., & utilities; wholesale & retail trade; mfg. durable goods; finance, insurance, & real estate. Where Lived at Age 16: no answer; farm; this city; small city.
15	1,899	369	135	Job-Seeking Method: union; did not look; state employment agency; newspapers. Health Problem: no. Relation to Head: non-relative of head with own relations in household; other relative of head; non-relative of head without relations in household. Occupation: all farm workers; managerial & admin.; craftsmen & foremen; professional & technical; operatives (except trans.); clerical.
25	1,894	369	30	Job-Seeking Method: union; did not look; state employment agency; newspapers. Health Problem: no. Relation to Head: non-relative of head with own relations in household; other relative of head; non-relative of head without relations in household. Occupation: service workers; laborers (except farm); sales; trans. equipment operatives. Family Size: two, three, four or six family members.

Table 100. (Continued)

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
23	1,873	336	39	Job-Seeking Method: union; did not look; state employment agency; newspapers. Health Problem: yes. Occupation: clerical; professional & technical; trans. equipment operatives; craftsmen & foremen; operatives (except trans.).
27	1,872	329	32	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Industry: mfg. non-durable goods; trans., comm., & utilities; wholesale & retail trade; mfg. durable goods; finance, insurance, & real estate. Where Lived at Age 16: country; suburbs; medium city; large city. Education: 8 to 11 years or more than 12 years of school.
21	1,777	393	37	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Industry: professional; personal services; construction; public administration; agri., forestry, & fisheries; business & repair services. Occupation: craftsmen & foremen; trans. equipment operatives; all farm workers; clerical; professional & technical.
17	1,748	402	33	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: other relative of head; non-relative of head without relations in household. Household Size: two or more persons in household. Industry: mfg. non-durable goods; trans.,comm., & utilities; business & repair services; no answer; professional.

Table 100. (Continued)

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
26	1,542	566	28	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Industry: mfg. non-durable goods; trans., comm., & utilities; wholesale & retail trade; mfg. durable goods; finance, insurance, & real estate. Where Lived at Age 16: country; suburbs; medium city; large city. Education: less than 8, or 12 years of school.
24	1,518	815	30	Job-Seeking Method: union; did not look; state employment agency; newspapers. Health Problem: no. Relation to Head: non-relative of head with own relations in household; other relative of head; non-relative of head without relations in household. Occupation: service workers; laborers (except farm); sales; trans. equipment operatives. Family Size: one, five, seven or more family members.
16	1,480	574	63	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: other relative of head; non-relative of head without relations in household. Household Size: two or more persons in household. Industry: mfg. durable goods; public administration; personal services; construction; finance, insurance, & real estate; entertainment & recreation; wholesale & retail trade.
20	1,396	641	41	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: non-relative of head with own relations in household; head with other relations in household; head without relations in household. Industry: professional; personal services; construction; public

Table 100. (Continued)

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
				administration; agri., forestry, & fisheries; business & repair services. Occupation: managerial & admin.; service workers; laborers (except farm); operatives (except trans.).
22	1,308	667	33	Job-Seeking Method: union; did not look; state employment agency; newspapers. Health Problem: yes. Occupation: laborers (except farm); service workers; sales; managerial & admin.
12	1,113	566	35	Job-Seeking Method: no answer; ask friends & relatives; private employment agency; directly to employer; other; community organization. Relation to Head: other relative of head; non-relative of head without relations in household. Household Size: one person in household; no answer.
Total	1,883	382	1,665	

Table 101. Annual Hours in the Labor Force of Male Workers 16-64 Years Old, Not in School or Armed Forces in Last 12 Months, Chicago (Area II) Poverty Area, Final AID Groups in Rank Order by their Averages

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
19	2,017	148	25	Job-Seeking Method: private employment agency; newspapers; state employment agency; did not look. Health Problem: yes. Industry: business & repair services; public administration; finance, insurance, & real estate; wholesale & retail trade; personal services.
7	1,989	210	731	Job-Seeking Method: private employment agency; newspapers; state employment agency; did not look. Health Problem: no. Relation to Head: non-relative of head with own relations in household; head with relations in household.
13	1,930	314	333	Job-Seeking Method: private employment agency; newspapers; state employment agency; did not look. Health Problem: no. Relation to Head: head without relations in household; non-relative of head without relations in household; other relative of head. Industry: public administration; mfg. durable goods; finance, insurance, & real estate; personal services; mfg. non-durable goods; trans., comm., & utilities; professional; wholesale & retail trade; no answer.
11	1,898	318	121	Job-Seeking Method: ask friends & relatives; directly to employer; union; no answer; community organization; other. Health Problem: no. Age: 25-44; 55-59.
15	1,837	414	65	Job-Seeking Method: ask friends & relatives; directly to employer; union; no answer; community organization; other. Health Problem: no. Age: 16-24; 45-54; 60-64. Family Size: one, three; seven or more family members.

Table 101. (Continued)

Group Number	Mean Hrs. in Labor Force	Standard Deviation	Number of Cases	Characteristics of Workers
12	1,723	542	33	Job-Seeking Method: private employment agency; newspapers; state employment agency; did not look. Health Problem: no. Relation to Head: head without relations in household; non-relative of head without relations in household; other relative of head. Industry: entertainment & recreation; business & repair services; construction.
17	1,676	582	26	Job-Seeking Method: ask friends & relatives; directly to employer; union; no answer; community organization; other. Health Problem: no. Age: 16-24; 45-54; 60-64. Family Size: two, four, five or six family members. Occupation: managerial & admin.; trans. equipment operatives; operatives (except trans.); laborers (except farm).
18	1,612	598	49	Job-Seeking Method: private employment agency; newspapers; state employment agency; did not look. Health Problem: yes. Industry: mfg. durable goods; mfg. non-durable goods; trans., comm., & utilities; professional; construction.
8	1,455	643	37	Job-Seeking Method: ask friends & relatives; directly to employer; union; no answer; community organization; other. Health Problem: yes.
16	1,367	680	25	Job-Seeking Method: ask friends & relatives; directly to employer; union; no answer; community organization; other. Health Problem: no. Age: 16-24; 45-54; 60-64. Family Size: two, four, five or six family members. Occupation: service workers; clerical; craftsmen & foremen; professional & technical.
Total	1,913	350	1,445	

Chapter 8

SUMMARY AND POLICY RECOMMENDATIONS

In this study we sought new knowledge about the relationship of inner-city male workers' socioeconomic characteristics to their success in the labor market. Specifically, we wanted to learn more about the extent to which low incomes and employment levels in urban ghettos and barrios are the result of discrimination against workers who are black, of Spanish origin, or relatively young or old. Also, to what degree can low income and employment levels be raised by upgrading the education, job skills, health, and job-seeking methods of the poor? Furthermore, are income and employment levels influenced by poverty-area workers' residential origin, locational ties, and their family relationships and responsibilities? Finally, how much are income and employment affected by differences in poverty-area workers' occupational and industrial attachments?

Because a summary of all of the findings presented in Chapters 4, 5, 6, and 7 would be both lengthy and redundant, we shall reiterate only our major conclusions. Then we shall offer some specific policy recommendations that follow from our results.

Findings

It is the general finding of this study that each of the major elements that we tried to measure--discrimination, employability development, and economic structure--plays a role in determining how many hours per year a poverty-area worker will be employed and how much his annual income will be. Moreover, when the ghetto workers are seeking employment, each of these forces has an effect on the length of time that they will be unemployed.

Our specific findings follow.

1. Workers who are black or of Spanish origin are more likely to reside in an urban poverty area than are Anglo workers. Moreover, Anglo workers who do live in urban poverty areas average higher in income than their black and Spanish-origin neighbors, and the time spent unemployed is likely to be shorter for a white worker than for a black worker in the same area.

Although our findings suggest that discrimination and variations in subcultural life-styles and attitudes have some direct impact on poverty levels of workers within each area, race and ethnicity generally are not major reasons for the income and employment differences within each sample. There is, however, the possibility that race and ethnicity have more of an indirect than direct relationship to income and employment success by affecting such factors as educational level, job training, and health; but these indirect linkages were not analyzed in this study.

There is some indication that the chances of breaking out of poverty for workers who are white or black, non-Spanish or Spanish, are greater in the low-income areas with larger white populations. In other words, we are suggesting that programs that improve personal skills and put workers in higher-status jobs in higher-wage industries will bring greater gains in income to workers, regardless of race, who live in poverty areas having a majority of white residents.

Unexpectedly, we found that in every area Spanish-origin workers were underrepresented in the high unemployment category (in St. Louis' poverty area and Chicago's south-side poverty area the Spanish-origin samples are quite small).

2. Average income and employment levels are higher for veterans than for non-veterans in all four poverty areas.

The income advantages of veterans over non-veterans are quite sizable in the St. Louis and San Antonio poverty areas. However, when the other predictors in our study are controlled, veteran status has little independent effect on income or employment in any of the poverty areas. Hence, veteran status is associated with other predictors in our study. This predictor would appear to have indirect linkages to income and employment through such factors as education, job training, occupation, and industry. Nevertheless, veteran status may be one of the better indicators for distinguishing those clients who would and would not fail in various employment and training programs. Veterans have received some kind of training and job experience during their time in the service. Some have used the G.I. Bill to obtain education and job training after returning to civilian life. Also, veterans get extra points on civil service exams and sometimes they are given preference in other hiring situations.

3. There is some evidence that workers from the local city or other large cities work fewer hours than migrants to the poverty area who come from smaller cities or rural areas.

In three of the four poverty areas studied (San Antonio is the exception), unemployment lasts longer for workers from the local city than for workers from most of the other categories of communities. The relationship of residential origin to income, however, indicates that in the two Chicago poverty areas the workers of local origin or from some of the larger cities earn more than do migrants from small cities or rural areas, while in the St. Louis and San Antonio areas the relationship to income tends to be reversed.

The variations found in the employment levels and residential background provide some support for the hypothesis that young migrants from small cities or rural areas are willing to take jobs in the secondary industries whereas these are unacceptable to young workers who grew up in the local community. It may be that the latter workers receive considerable peer-group pressure to take on higher-status, better-paying jobs. In contrast, the young migrants may not have many close friends living in the poverty area, so they would not be exposed to their pressure. Moreover, for workers from rural areas, most of the lower-status, lower-wage jobs may look better than anything available back home.

The differences in the income findings suggest that some poverty areas are less detrimental to native workers than are others--at least in comparison with the areas of origin for migrants to each area. The local region may have unique conditions affecting migrants and nonmigrants that cannot be generalized to the national level.

4. Years of school completed generally has a positive association with income. However, our evidence suggests that for older workers with only an eighth grade education, their experience and tenure counteract some of the negative impacts fewer years of schooling have on income and employment levels. Moreover, at the time older workers graduated from the eighth grade educational requirements for employment were lower than they are now.

Our results show that the impact of job training on poverty workers' income levels is not as great as the impact from educational attainment. However, our findings would probably show wider income differences between workers with and without job training if our measure of job training did not include workers in the Neighborhood Youth Corps.

Workers' own response to the question of whether or not lack of skill, experience, or education is a barrier to either "holding a job, finding a better job, looking, or wanting a job" is not as good an indicator as is "years of school completed" of differences in income, employment, and unemployment levels. The proportion of workers who answered yes to this question seems relatively low for samples from poverty neighborhoods. If so, the explanation might be that some poverty-area workers do not believe that raising their educational level or improving their job skills or gaining more experience would be sufficient for raising their employment and income levels. Instead, they may believe that other factors would still be major barriers to their breaking out of poverty, such as "fate" or "bad luck," unique personal problems, discrimination, or the political and economic system in our society.

5. Age is one of the strongest predictors of income, employment, and unemployment levels in each of the poverty areas studied. The correlation of age with income follows the expected curvilinear pattern, with the lowest income and employment levels in the youngest years and the next lowest in the oldest working years.

The association of workers' ages with their income, employment, and unemployment levels is not much different in the ghetto or barrio from what it is in the rest of our society. The number of workers who said that they are either not holding a job, not finding a better job, or discouraged from looking for or wanting a job because employers think that they are too young or too old is small, but their income and employment levels are far below the poverty-area average. This is a group of clients that clearly needs programs to help them overcome their age barriers, and that may already have some useful insights about the problem that would help in determining the appropriate approaches for solving it. Our results suggest that age-group discrimination is a more serious problem for poverty-area workers than are racial and ethnic discrimination.

6. Workers who said that health problems hinder their employment success show sizable losses in hours of employment and income level. Moreover, in three of the four poverty areas the period of unemployment for a worker seeking a job is likely to be longer than average if he has a health problem.

About 8 percent of the workers within the St. Louis poverty area and in each of the two Chicago poverty areas and about 11 percent of the workers in the San Antonio poverty area indicated that they have a disability or an illness causing employment difficulties for them. Our findings reveal that the extent to which poor health lowers these workers' employment and income levels remains sizable even after taking into account the effects of all the other determinants measured in the study. In most of the areas, the health variable is one of the better predictors of differences in employment levels among all workers. It is less successful, however, in accounting for the differences in income received by these workers.

7. Poverty-area workers with excessive family responsibilities as well as those with minimal family associations are more likely to fall below the average employment and income levels in their areas while workers in stable family situations are more likely to be above the average.

Family structure is considered relevant from a human capital perspective because the responsibility of supporting a family would appear to provide an incentive for achieving full-time, full-year employment and a higher income.

Also, family life may be associated with more stable social patterns that in turn contribute to employment success.

It can also be concluded, however, that differences in the family patterns found in the ghetto or barrio are the result rather than the cause of variations in the workers' incomes. If a low-income worker who gets married and starts raising children is not able to break out of poverty, he may be unable to continue supporting his growing family. Consequently, he may be forced to desert his family in order to maintain his self-respect and to qualify his family for welfare payments.

8. The approximately eight out of ten poverty-area employed workers who did not look for other work during the previous year earned considerably more than those who did search for a new job. Hence, simply staying employed full-time, full-year the worker can travel quite far along the road out of poverty, though it is not always far enough. However, there were also sizable differences in the income and employment levels of those who sought work, according to the type of job-seeking method they used.

The most popular methods of job-seeking were going directly to the employer or asking friends and relatives about opportunities. The data indicate that asking friends and relatives was one of the most successful methods for keeping the period of unemployment relatively short, and checking with unions was associated with relatively high incomes. Workers with relatively long periods of unemployment went directly to the employer or used the State Employment Service, and workers with some of the lowest incomes were most likely to have checked with community organizations.

9. Differences in the occupation and industry to which a worker is attached produce substantial differences in the income and employment

levels of poverty-area workers independent of their social background, education, and training.

Workers residing in poverty areas find that the most opportunities for full-year employment at higher wages are in government jobs. Construction workers generally have the lowest employment levels, but their income levels remain high.

10. Many of the relationships of the socioeconomic variables to income and employment are not uniform throughout each sample. The main effects of each predictor are not always the same or even present among all groups of workers in an area. Each area has some unique conditions that can best be understood by local experts and leaders, as they have the best opportunity to develop knowledge about how all of the relevant forces affecting poverty in the community interrelate to form an organic whole.

Recommendations

We offer the following specific recommendations for courses of action to be undertaken or further emphasized by the Department of Labor and other government agencies to help low-income workers obtain better jobs and break out of poverty.

1. Upgrading Skills and Employability and Providing More Career Information before Youth Complete Formal Schooling.

Between 1975 and 1980, the number of white teen-age males (16 to 19 years) is projected to increase only slightly, while the number of nonwhite teen-age males is projected to increase almost 13 percent. But from 1980 to 1985, the number of white teen-age males is expected to decrease by about 11 percent, and the number of nonwhite teen-age males should drop by approximately 7 percent (U.S. Office of the President, 1977:258, Table E-8).

Unfortunately, the employment opportunities for disadvantaged teen-agers may not improve when these eventual declines in their numbers occur. The traditional private employers of inner-city teen-agers--small retail stores, Mom and Pop grocery stores, factories with a large proportion of entry-level jobs requiring few skills--are disappearing from many urban centers. Automation is eliminating many other jobs for the unskilled youth.

Further efforts are needed to help young people in the ghettos and barrios to make the difficult transition from educational institutions to places of work. Without special programs, communication about job opportunities and career preparation is generally worse in the low-income area than in the rest of the metropolis. The Department of Labor's School to Work Transition Program (SWTP) is developing a number of pilot projects that should be of particular benefit to the youth in urban poverty areas. For example, the Vocational Exploration Program, which began during the summer of 1976, was a SWTP pilot project designed specifically for low-income youth during the summer months. The objectives of SWTP include "integration of classroom instruction with work experience; design and development of curriculum materials that will better prepare students for occupational requirements; and preparation of youth for new occupational fields. Other aims are to develop career information and knowledge of local training, employment, education, and service opportunities and to provide better counseling, guidance, and placement assistance using the employment-related resources of the community" (U.S. Office of the President, 1977:53).

If students can get career planning and exploration activities before they graduate or drop out of school, successful transition to work is more likely. Indeed, they may be more strongly motivated to stay in school and apply themselves until graduation. It is important, however, that these projects be designed imaginatively to fit in with the unique local conditions of each poverty area. The differences that we found between each area suggest that general programs cannot be applied uniformly to these areas. The lessons learned from the inadequacies of past programs can contribute to designing an effective array of job information and training strategies to fit the needs of youth in various types of areas.

The pilot projects sponsored by the National Alliance of Businessmen (NAB) and the AFL-CIO Human Resources Development Institute (HRDI) designed to give young participants an opportunity to explore, at first hand, the workings of private industry are the types of programs that are needed by many low-income youth (see U.S. Office of the President, 1977:53). However, when disadvantaged young men participate in these kinds of programs special care must be taken to insure that they do not feel manipulated, that their culture is being rejected, or that it is a useless exercise because the better jobs will never be made available to them. If this situation develops, the participants will probably reject or subvert the program (see Wellman, 1977). Also, these programs require considerable cooperation between the secondary schools, vocational schools, colleges, government agencies, and industry if they are going to work.

It must be recognized that young men 15 to 24 years old in the ghetto as well as outside the ghetto are normally in a different stage of social development than prime-age or older workers. Even young men who do not go to college generally do not go directly from high school graduation to lifetime employment. The transition takes a considerable amount of time, and during the transition, young workers will continue to seek jobs in the secondary labor market. William Spring (1956), for example, proposes that work in secondary jobs may be a good thing for the young worker when self and world exploration take precedence over sizable economic returns. Spring believes that the key to the transition from secondary jobs to primary career jobs is to gain work in "bridge" jobs that provide employment at decent pay, informal and close supervision, informal personnel policies, a chance to learn a trade, and linkages (information, contacts) with the larger, more profitable firms in the central economy.

2. Meeting the Employment Needs of Older Workers.

Like older workers in other areas older workers in poverty areas experience problems of age discrimination, physical decline, and obsolete skills. Further attention needs to be given to raising the employment and income levels of the aged poor. The Senior Community Service Employment Program (authorized by Title IX of the Older Americans Act of 1974 as amended) provides employment for economically disadvantaged persons aged 55 years and older in part-time community service jobs. "In addition to subsidized job opportunities, the program provides participants with yearly physical examinations, personal and job-related counseling, job training, and in some cases, placement in unsubsidized jobs" (U.S. Office of the President, 1977:53).

The local Employment Service offices provide for older workers such standard activities as counseling, job development, referral to training or to other agencies for social services, and job placement. These services, however, are provided on an intensified and individualized basis (U.S. Office of the President, 1976:124). The Employment Service also has conducted training sessions designed to increase staff awareness of the employment problems of older workers and to review procedures for assisting these workers in getting jobs. These activities include "techniques for appraising the skills and abilities of older workers, ways of improving their ability to sell their skills to potential employers, methods of developing job openings for them, approaches to changing employer attitudes toward older workers, and uses of community resources to serve them" (U.S. Office of the President, 1976:124-125).

These programs appear to be aimed in the right direction, but the effectiveness of the specific means for carrying them out needs to be given considerable attention so that greater success can be achieved. For example, an expansion of job information may be required to indicate more clearly the openings that are particularly suited or not suited for older workers. Also, more attention needs to be given to effective enforcement of anti-discrimination legislation.

Another possibility is to have a more effective division of labor between direct income transfers to the aged poor and counseling-training-placement programs for this group. This would make it possible to concentrate the latter programs more exclusively on their more narrowly defined functions. Moreover, the retraining and placement programs would then be able to select the more promising individuals, which, in turn, would mean that the training could be geared more clearly to ladder-job openings, whether in the private sector or in public service (see Ulman, 1977:119). Yet, many older workers who are no longer suited for their former occupations and not retrainable for new occupations that have openings may still be better off, both mentally and physically, in subsidized job programs like the Senior Community Service Employment Program rather than simply retired with an adequate income supplement. The role identity and sense of purpose, social contacts, and physical examinations provided in these programs may keep older workers happier and healthier. These programs may also make useful contributions to the community.

3. Expansion of Job Information.

Our finding that going directly to the employer is the most common job-seeking method used by low-income workers in our sample and also associated with high unemployment levels among these workers suggests that the existing labor market information system needs to be expanded. According to Gambill's (1978) study of the Department of Labor's current labor market information system, most job information is collected primarily for employability development, economic analysis, or program design. Gambill argues that more resources need to be directed toward providing information that can assist the State Employment Service in matching currently available workers with currently available jobs.

Other efforts also are required to improve the image of the local State Employment offices so that more poverty area workers will seek their services. However, if the opinions of some Employment Service critics are correct, to get more clients the Employment Service will have to change from frequently being viewed as "a passive accessory to discriminatory employment practices" (Lawyers' Committee for Civil Rights under Law and the National Urban Coalition, 1971:60) and a "placement service for the secondary labor market" (Harrison, 1977:107).

4. Adapting the Labor Market to the Poverty-Area Worker.

As competing, profit-making operations, private companies want workers who can contribute to their success. Nevertheless, programs designed both to adapt the disadvantaged worker to the organization and vice-versa have emerged in some companies, and the Federal Government needs to use its power and resources to encourage and monitor these efforts. Organizations opening up to disadvantaged minority workers may need assistance in learning about specific procedures and situations that they must deal with in the integration process: recruitment and selection, training, job placement, job performance, peer group adjustment, superior-subordinate relationships, and promotion decisions (see Franklin and Sherwood, 1974).

In primary industries more consideration needs to be given to the possibilities--during a probationary period--of learning how temporarily to accommodate to the unstable work characteristics of workers from the secondary labor market. For example, an enterprise might be able to reorganize some of its operations to make efficient use of these unstable workers while they are going through a transition period of training to develop habits of regularity and punctuality. The Federal Government may be needed to provide the investment necessary to effect these changes.

5. Workers' Residential Origin Should be Considered in Counseling and Job-Information Programs.

Some of our findings suggest that young workers who grew up in the local area need counseling and job information that is different from that received by young migrants from small cities or rural areas. Migrants from other large cities may need still different kinds of counseling and information to ease the transition from school to work.

Each group has had some different kinds of environmental conditions determining their values and behavior patterns. Moreover, the workers native to the local poverty area are likely to still be influenced by a number of peers in their neighborhood. These different social conditions may require quite different strategies on the part of employment counselors, and the job information appropriate for each group might vary. For example, the locally-reared young worker may feel that he should take only higher-status, better-paying jobs, but none may be available for him, at least given his present training and experience. Nevertheless, the counselor might be able to show him information about "bridge" jobs. These jobs may appear to be secondary jobs while in fact they could lead to primary career employment. The counselor would need to communicate to the worker that this job was compatable with his values about status and pay. In contrast, a young worker from a rural area might not have the resistance to taking this type of job that the other worker has because he has not been socialized to think of it as degrading work.

6. Public Service Employment and Income Maintenance.

The evidence suggests that family life is supportive of stable employment patterns, so it would appear that government programs providing income supports and public service employment should be designed for keeping male workers with their families when employment and financial problems arise. Otherwise, separation may precipitate further cycles of unemployment and money problems. Also, innovative strategies are needed to provide stronger family ties for workers who are too young for marriage and for older workers who are single, divorced, or widowed.

These programs, however, need to be considered experimental and carefully analyzed, for the relationship between income and family structure is affected by other important variables. For example, a recent study by the Stanford Research Institute showed that family dissolution jumped sharply when the government started guaranteeing a minimum income to poor couples. The study found, in effect, that by guaranteeing many low-income women who were not earning or capable of earning their own living a minimum income even if they became separated from their mates, the experiment allowed the women to leave their husbands ("Guaranteed income brings marital splits," 1978:3).

7. Programs for Workers with Health Problems.

Our findings show that poverty-area workers with health problems clearly need special assistance. The data underscore the importance of the Department of Labor coordinating its counseling, training, and job placement programs with the health services arranged through the Department of Health, Education, and Welfare.

An effort should be made to learn more about the extent to which health problems are a cause of low employment levels and the extent to which they are the result of unemployment and loss of income. For some workers, effective employment programs may be a more important determinant of good health than is medical care.

8. Increasing the Supply of Primary Career Jobs.

We support the position that employability development is necessary but not sufficient for solving employment problems in the urban poverty areas. The Federal Government must also help to find solutions to those segments of the economic system that provide less than satisfactory jobs and incomes for those with adequate ability and skills. As we reduce the ratio of unstable jobs in the system, we need to provide special adjustments for unstable workers to help them make the transition to stable employment.

In summary, we see no single, preponderant remedy for eliminating poverty in our cities. The findings of this study lead us to recommend a variety of manpower policies and programs--ranging in focus from individual to societal levels, and involving both the private and public sectors--to help solve the problems of poverty-area workers. We also believe that the success of these programs depends in part on the efforts of policymakers to create more effective collaborative processes between the numerous and diverse institutions that share the responsibility for combating the employment problems of the poor.

REFERENCES

Alexander, Arthur J.
1970 Structure, Income, and Race: A Study in Internal Labor Markets. Document R-577-OEO. Santa Monica: RAND (October).

Andrews, Frank M., James N. Morgan, and John A. Sonquist
1967 Multiple Classification Analysis: A Report on a Consumer Program for Multiple Regression Using Categorical Predictors. Ann Arbor: Survey Research Center, Institute for Social Research, The University of Michigan.

Bacon, Lloyd
1971 "Poverty among interregional rural-to-urban migrants." Rural Sociology 36 (June):125-140.

Becker, G. S.
1964 Human Capital. New York: Columbia University Press.

Berg, Ivar
1969 Education and Jobs: The Great Training Robbery. New York: Praeger Books.

Bergman, Barbara and Jerolyn R. Lyle
1970 "Differences amongst cities and industries in the occupational standing of Negroes in the private sector." University of Maryland, mimeograph copy (September).

Blau, Peter M. and Otis Dudley Duncan
1967 The American Occupational Structure. New York: John Wiley and Sons.

Blevins, Audie L. Jr.
1971 "Socioeconomic differences between migrants and nonmigrants." Rural Sociology 36 (December):509-520.

Bluestone, Barry A., William M. Murphy, and Mary Stevenson
1973 Low Wages and the Working Poor. Policy Papers on Human Resources and Industrial Relations 22. (July) Ann Arbor, Mich.: The Institute of Labor and Industrial Relations, The University of Michigan-Wayne State University.

Bowen, William G. and T. Aldrich Finegan
1966 "Educational attainment and labor force participation." American Economic Review 56 (May):567-582.

Bowles, G. K., A. L. Bacon, and P. N. Ritchey
1973 Poverty Dimensions of Rural to Urban Migration: A Statistical Report. Washington, D.C.: Economic Research Service, USDA in cooperation with Institute for Behavioral Research, University of Georgia and the Office of Planning, Research, and Evaluation, Office of Economic Opportunity.

Chilman, Catherine S.
1975 "Families in poverty in the early 1970's: rates, associated factors, some implications." Journal of Marriage and the Family 37 (February):49-60.

Cohen, Malcolm, Samuel Rea, and Robert Herman
1970 A Micro Model of Labor Supply. Washington, D.C.: U.S.G.P.O.

Cohn, Jules
1971 The Conscience of Corporations. Baltimore: The Johns Hopkins University Press.

Cutright, Phillips
1974 "Region, migration, and the earnings of white and black men." Social Forces 53 (December):297-305.

Doeringer, Peter B., Penny Feldman, David M. Gordon, Michael J. Piore, and Michael Reich
1969 "Urban manpower programs and low-income labor markets: a critical assessment." Manpower Administration, U.S. Department of Labor, mimeograph copy (January).

Doeringer, Peter B. and Michael J. Piore
1971 Internal Labor Markets and Manpower Analysis. Lexington, Mass.: Heath Lexington Books.

Duncan, Otis D.
1966 "Path analysis: sociological examples." The American Journal of Sociology 72 (July):1-16.

Featherman, David L.
1971 "Residential background and socioeconomic achievements in metropolitan stratification systems." Rural Sociology 36 (June): 107-124.

Ferman, Louis A.
1969 The Irregular Economy. Ann Arbor: Institute of Labor and Industrial Relations, Research Division, Univ. of Michigan-Wayne State Univ. Mimeographed.

Fisher, Anthony
1966 Poverty and Labor-Force Participation. Research Paper P-273 (February). Wash. D.C.: Institute for Defense Analyses, Economic and Political Studies Division.

Form, William H.
1971 "The accomodation of rural and urban workers to industrial discipline and urban living: a four-nation study." Rural Sociology 36 (December):488-508.

Franklin, Howard L. and John J. Sherwood, eds.
1974 Integrating the Organization: A Social Psychological Analysis. New York: Free Press.

Freedman, Marcia
1969 The Process of Work Establishment. New York: Columbia University Press.

Friedlander, Stanley L.
1972 Unemployment in the Urban Core: An Analysis of Thirty Cities with Policy Recommendations. New York: Praeger Publishers.

Gambill, Carol H.
1978 A Conceptual Framework for a Comprehensive Labor Market Information System. Unpublished Ph.D. Dissertation, University of Missouri-Columbia.

Gans, Herbert J.
1972 "The positive functions of poverty." American Journal of Sociology 78 (September):275-289.

Gintis, Herbert
1969 Alienation and Power: Toward a Radical Welfare Economics. Unpublished Ph.D. Dissertation, Harvard University.

1971 "Education, technology and the characteristics of worker productivity." American Economic Review 61 (May):266-279.

Goldfarb, Robert S.
1969 "The evaluation of government programs: the case of New Haven's manpower training activities." Yale Economic Essays 9 (Fall):59-106.

Goodwin, Leonard
1972 Do the Poor Want to Work? A Social-Psychological Study of Work Orientations. Wash., D.C.: The Brookings Institution.

Gordon, David M.
1971 Class, Productivity and the Ghetto: A Study of Labor Market Stratification. Unpublished Ph.D. Dissertation, Harvard University.

1972 Theories of Poverty and Underemployment: Orthodox, Radical, and Dual Labor Market Perspectives. Lexington, Mass.: Lexington Books, D. C. Heath.

Grebler, Leo, Joan W. Moore, and Ralph C. Guzman
1970 The Mexican-American People: The Nation's Second Largest Minority. New York: The Free Press.

"Guaranteed income brings marital splits"
1978 Columbia Daily Tribune, May 3, p. 3., Columbia, Missouri.

Gurin, Gerald
1970 A National Attitude Study of Trainees in MDTA Institutional Programs. Ann Arbor: Institute for Social Research, University of Michigan, Table 51.

Haller, Archibald O.
1968 "Rural poverty in the United States." In Final Report of the President's National Advisory Commission on Rural Poverty. Wash., D.C.: U.S.G.P.O., 149-169.

Hammermesh, Daniel S.
1971 Economic Aspects of Manpower Training Programs. Lexington, Mass.: Heath Lexington Books.

Hanoch, Giora
1967 "An economic analysis of earnings and schooling." Journal of Human Resources 2 (Winter):310-329.

Harrison, Bennett
1971 "Education and underemployment in the urban ghetto." In D. M. Gordon (ed.), Problems in Political Economy: An Urban Perspective. Lexington, Mass.: D. C. Heath.

1972 Education, Training, and Urban Ghetto. Baltimore: Johns Hopkins University Press.

1977 "Institutions on the periphery." In D. M. Gordon (ed.), Problems in Political Economy: An Urban Perspective. 2d ed. Lexington, Mass.: D. C. Heath, 102-107.

Hathaway, Dale E., J. Allan Beegle, and W. Keith Bryant
1968 People of Rural America: A 1960 Census Monograph. Wash., D.C.: U.S.G.P.O.

Hellervik, Lowell W.
1974 "Behavior change: strategies for human development among disadvantaged minorities." In Howard L. Franklin and John J. Sherwood (eds.), Integrating the organization: A Social Psychological Analysis. New York: Free Press, 102-126.

Hill, C. Russell
1969 "The economic determinants of labor supply for the urban poor." Presented to the North American Regional Conference of the Econometric Society.

1971 "Education, health, and family size as determinants of labor market activity for the poor and nonpoor." Demography 8 (August):379-388.

Jenks, Christopher, et al.
1972 Inequality: A Reassessment of Family Schooling in America. New York: Basic Books.

Kidder, Alice H.
1968 "Racial differences in job search and wages." Monthly Labor Review 91 (July):24-26.

Kuvlesky, William P. and George W. Ohlendorf
1968 "A rural-urban comparison of the occupational status orientations of Negro boys." Rural Sociology 33 (June):141-152.

Lansing, John B., and James N. Morgan
1967 "The effect of geographical mobility on income." The Journal of Human Resources 2 (Fall):449-460.

Lawyers' Committee for Civil Rights Under Law and the National Urban Coalition
1971 Falling Down on the Job: The United States Employment Service and the Disadvantaged. Wash. D.C." The National Urban Coalition.

Levitan, Sar A. and Garth L. Mangum
1967 Federal Training and Work Programs in the Sixties. Ann Arbor: Institute of Labor and Industrial Relations, University of Michigan, Part 2.

Lewis, Oscar
1959 Five Families: Mexican Case Studies in the Culture of Poverty. New York: Basic Books.

1966 "The culture of poverty." Scientific American 215:4:19-25.

Lieberson, Stanley and Christy A. Wilkinson
1976 "A comparison between Northern and Southern blacks residing in the North." Demography 13 (May):199-124.

Liebow, Elliot
1967 Tally's Corner: A Study of Negro Streetcorner Men. Boston: Little, Brown.

Long, Larry H.
1974 "Poverty status and receipt of welfare among migrants and nonmigrants in large cities." American Sociological Review 39 (February):46-56.

Long, Larry H. and Lynne R. Heltman
1975 "Migration and income differences between black and white men in the North." American Journal of Sociology 80 (May):1391-1409.

Main, Earl D.
1968 "A nationwide evaluation of M.D.T.A. institutional training." Journal of Human Resources 3 (Spring):159-170.

Mangum, Garth L.
1967 The Contributions and Costs of Manpower Development and Training. Policy Papers on Human Resources and Industrial Relations Number 5. Ann Arbor: Institute of Labor and Industrial Relations at the University of Michigan (May 1968).

1968 MDTA: Foundation of Federal Manpower Policy. Baltimore: The Johns Hopkins University Press.

Marris, Peter and Martin Rein
1973 Dilemmas of Social Reform: Poverty and Community Action in the United States. 2d ed. Chicago: Aldine Publ. Co.

Masters, S. H.
1972 "Are black migrants from the South to the Nothern cities worse off than blacks already there?" Journal of Human Resources 7. (Fall):411-423.

Matza, David
1966 "The disreputable poor." In N. J. Smelser and S. M. Lipset (eds.), Social Structure and Mobility in Economic Development. Chicago: Aldine, 1966.

Mayo, Elton
1945 The Social Problems of an Industrial Civilization. Boston: Harvard University, Graduate School of Business Administration.

McCall, John J.
1970 "Economics of information and job search." Quarterly Journal of Economics 84 (February):113-126.

Michelson, Stephan
1968 "On income differentials by race: an analysis and a suggestion." The Conference Papers of the Union for Radical Political Economics (December).

1969 "Rational income decisions of Negroes and everybody else." Industrial and Labor Relations Review 23 (October).

Miller, Walter B.
1958 "Lower class culture as a generating milieu of gang delinquency." Journal of Social Issues 14:5-19.

Mills, Daniel Quinn
1968 "The evaluation of manpower training programs." Harvard University Program on Regional and Urban Economics, Discussion Paper Number 28.

Mincer, Jacob
1962 "Labor force participation of married women: a study of labor supply." Aspects of Labor Economics. Conference of the Universities--National Bureau Committee for Economic Research. New Jersey: Princeton University Press.

1971 "Schooling, age, and earnings." National Bureau of Economic Research, mimeograph copy (April).

Mooney, Joseph D.
1967 "Urban poverty and labor force participation." American Economic Review 57 (March):104-119.

Morgan, James N., Katherine Dickson, Jonathan Dickson, Jacob Benus, and Greg Duncan
1974 Five Thousand American Families--Patterns of Economic Progress. Ann Arbor: Institute for Social Research, Univ. of Michigan.

Morgan, James N. and Robert C. Messenger
1973 THAID: A Sequential Analysis Program for the Analysis of Nominal Scale Dependent Variables. Ann Arbor, Mich.: Institute for Social Research.

Moynihan, Daniel P.
1965 The Negro Family: The Case for National Action. Wash., D.C.: U.S. Department of Labor.

1969 Maximum Feasible Misunderstanding. New York: Free Press.

Mushkin, Selma J.
1962 "Health as an investment." The Journal of Political Economy 70 (Supplement: October):129-157.

National Manpower Conference, Oklahoma State University, 1968.
1968 The Rural to Urban Population Shift: A National Problem. Wash., D.C.: U.S.G.P.O.

Orshansky, Mollie
1969 "How poverty is measured." Monthly Labor Review 92 (February):37-41.

Page, David
1964 "Retraining under the Manpower Development Act: a cost benefit analysis." Public Policy 13 (1964):257-267.

Price, Daniel O.
1969 A Study of Economic Consequences of Rural to Urban Migration. Final Report, OEO Contract B 89-4594, submitted to the Procurement Division, Office of Economic Opportunity, Wash., D.C.

Purcell, Theodore V. and Gerald F. Cavanagh
1972 Blacks in the Industrial World: Issues for the Manager. New York: The Free Press.

Reder, Melvin
1969 "A partial survey of the theory of income size distribution." *In* Conference on the Size Distribution of Income and Wealth. Six papers on the Size Distribution of Wealth and Income. Lee Soltow, ed. New York: Columbia University Press.

Reiss, Albert J., Otis Dudley Duncan, Paul K. Hatt and Cecil C. North
1961 Occupations and Social Status. New York: The Free Press.

Ribich, Thomas I.
1968 Education and Poverty. Wash., D.C.: The Brookings Institute.

Rieger, Jon H.
1972 "Geographic mobility and the occupational attainment of rural youth: a longitudinal evaluation." Rural Sociology 37 (June):189-207.

Ritchey, P. Neal
1974 "Urban poverty and rural to urban migration." Rural Sociology 39 (Spring):12-27.

Rodman, Hyman
1963 "The lower-class value stretch." Social Forces 42 (December): 205-215.

Rosen, Sherwin
1971 "Learning and experience in the labor market." National Bureau of Economic Research, mimeograph copy (April).

Rushing, William A.
1972 Class, Culture, and Alienation; A Study of Farmers and Farm Workers. Lexington, Mass.: Lexington Books, D. C. Heath.

Schwarzweller, Harry K., James S. Brown and J. J. Mangalam
1971 Mountain Families in Transition. University Park, Penn.: The Pennsylvania State University Press.

Sewell, David O.
1967 "A critique of cost-benefit analysis of training." Monthly Labor Review (September):45-51.

Shelley, E. F. and Company
1970 Climbing the Job Ladder. New York: E. F. Shelley and Co.

Sheppard, Harold L. and A. Harvey Belitsky
1966 The Job Hunt; Job-Seeking Behavior of Unemployed Workers in a Local Economy. Baltimore: The Johns Hopkins Press.

Solie, Richard J.
1968 "Employment effects of retraining the unemployed." Industrial and Labor Relations Review 21 (January):210-225.

Somers, Gerald G.
1968 "Introduction." In G. G. Somers (ed.), Retraining the Unemployed. Madison: University of Wisconsin Press, 3-16.

Sonquist, John A.
1970 Multivariate Model Building: The Validation of a Search Strategy. Ann Arbor: Institute for Social Research, The University of Michigan.

Sonquist, John A., Elizabeth Lauh Baker and James N. Morgan
1971 Searching for Structure (Alias, AID-III): An Approach to Analysis of Substantial Bodies of Micro-Data and Documentation for a Computer Program. Ann Arbor: Survey Research Center, Institute for Social Research, The University of Michigan.

Sonquist, John A. and James N. Morgan
1964 The Dectection of Interacting Effects: A Report on a Computer Program for the Selection of Optimal Combinations of Explanatory Variables. Survey Research Center Monograph Number 35. Ann Arbor: Institute for Social Research, The University of Michigan.

Spring, William J.
1976 "Youth unemployment, bridge jobs and national policy." In National Commission for Manpower Policy, Directions for a National Manpower Policy: A Collection of Policy Papers Prepared for Three Regional Conferences. Special Report No. 14. Wash., D.C., 165-177.

Taylor, David P.
1968 "Discrimination and occupational wage differences in the market for unskilled labor." Industrial and Labor Relations Review 21 (April):375-390.

Thurow, Lester C.
1968 "Raising incomes through manpower training programs." In Anthony H. Pascal (ed.), Contributions to the Analysis of Urban Problems. Santa Monica: RAND.

1969 Poverty and Discrimination. Wash., D.C.: The Brookings Institution.

Twentieth Century Fund Task Force on Employment Problems of Black Youth
1971 The Job Crisis for Black Youth. Report of the Twentieth Century Fund Task Force on Employment Problems of Black Youth. With a Background Paper by Sar A. Levitan and Robert Taggart III. New York: Praeger Publishers.

Ulman, Lloyd
1977 "The uses and limits of manpower policy." In D. M. Gordon (ed.), Problems in Political Economy: An Urban Perspective. 2d ed. Lexington, Mass.: D. C. Heath, 113-119.

U.S. Bureau of the Census
1971 Census of Population: 1970. Employment Profiles of Selected Low-Income Areas. Final Report PHC (3)-50 San Antonio. Wash., D.C.: U.S.G.P.O.

1972 Census of Population: 1970. Employment Profiles of Selected Low-Income Areas. Final Report PHC (3)-16 Chicago, Ill.,-Summary; - 17 Chicago, Ill.-Area I; - 18 Chicago, Ill.-Area II; - 27 St. Louis, Mo.; and other selected cities. Wash., D.C.: U.S.G.P.O.

1975a Current Population Reports, Series P-60, No. 97, "Money Income in 1973 of Families and Persons in the United States." Wash., D.C.: U.S.G.P.O.

1975b Current Population Reports, Series P-60, No. 98, "Characteristics of the Low-Income Population: 1973." Wash., D.C.: U.S.G.P.O. Table 9.

1975c Current Population Reports, Series P-23, No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970." Wash., D.C.: U.S.G.P.O.

1976 Current Population Reports, Series P-60, No. 102, "Characteristics of the Population below the Poverty Level: 1974." Wash., D.C.: U.S.G.P.O.

1977 Current Population Reports, Series P-60, No. 107, "Money Income and Poverty Status of Families and Persons in the United States: 1976." Advance Report. Wash., D.C.: U.S.G.P.O.

U.S. Office of the President
1970 Manpower Report of the President. Prepared by the U.S. Dept. of Labor. Wash., D.C.: U.S.G.P.O.

1971 Manpower Report of the President. Wash., D.C.: U.S.G.P.O.

1974 Manpower Report of the President. Including Reports by the U.S. Department of Labor and the U.S. Dept. of Health, Education, and Welfare. Wash., D.C.: U.S.G.P.O.

1975 Manpower Report of the President. Including Reports by the U.S. Department of Labor and the U.S. Dept. of Health, Education, and Welfare. Wash., D.C.: U.S.G.P.O.

1976 Employment and Training Report of the President. Including Reports by the U.S. Dept. of Labor and the U.S. Dept. of Health, Education, and Welfare. Wash., D.C.: U.S.G.P.O.

1977 Employment and Training Report of the President. Including Reports by the U.S. Dept. of Labor and the U.S. Dept. of Health, Education, and Welfare. Wash., D.C.: U.S.G.P.O.

Valentine, Charles A.
1968 Culture and Poverty: Critique and Counterproposal. Chicago: University of Chicago Press.

Van Til, Sally B.
1973 Work and the Culture of Poverty: The Labor Force Activity of Poor Men. Unpublished Ph.D. Dissertation, Bryn Mawr College. Ann Arbor: University Microfilms.

Wachtel, Howard M.
1971 "Looking at poverty from a radical perspective." Review of Radical Political Economics 3 (Summer):1-19.

Weiss, Randall
1970 "The effect of education on the earnings of Blacks and Whites." Review of Economics and Statistics 52 (May):150-159.

Weiss, Robert S.
1968 Statistics in Social Research: An Introduction. New York: John Wiley & Sons.

Wellman, David
1977 "Putting on the poverty program." In D. M. Gordon (ed.), Problems in Political Economy: An Urban Perspective. 2d ed. Lexington, Mass.: D.C. Health, 120-128.

Winard, Arno I.
1970 "Delineation of current poverty areas in large cities," Paper Presented at the Annual Meeting of the Population Association of America, Atlanta, Ga., April 16-18.

1971 "1970 census data on poverty," Paper Presented at the Conference for Federal Agencies on the 1970 Census Held at the Department of Health, Education, and Welfare, Social and Rehabilitation Service, Wash., D.C., January 20.

Whyte, William F.
1955 Money and Motivation. New York: Harper.